Matrix Spike Recovery

WETLAB

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Sample ID: AX85017
Client ID: MNS-05

Method	Compound Name	Spike Level ug/Kg	Matrix Result ug/Kg	SPK Result ug/Kg	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group	QC Sample
EPA 314.0	Perchlorate in Solids	5000	ND	5210	104	85-115	10/14/08	10/15/08	$314S-081014A	AX85017

Comments:

Printed: 10/24/08 2:14:54 PM
APPL Standard MS

CHAIN-OF-CUSTODY RECORD

TETRA TECH

Client Name/Account #: TetraTech, Inc.
Address: 737 Bishop St., Suite 3020
City/State/Zip: Honolulu, HI 96813
Project Manager: Gary Floyd
Telephone Number: (808)533-3366 **Fax No.:** (808)533-3306
Sampler Name: (Print) Maren Anderson
Sampler Signature: Maren Anderson

Report To: Gary Floyd, Susan Carstenn, Yvonne Parry
Invoice To: Yvonne Parry
Project ID: Makua Shellfish Study
Project #: 100-SFO-T95M78

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Multi-incremental Sample	Preservative: Ice	Preservative: HNO_3 (Red Label)	Preservative: HCl (Blue Label)	Preservative: NaOH (Orange Label)	Preservative: H_2SO_4 Plastic (Yellow Label)	Preservative: H_2SO_4 Glass(Yellow Label)	Preservative: None (Black Label)	Preservative: Other (Specify)	Matrix: Groundwater	Matrix: Wastewater	Matrix: Drinking Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify):	Analyze For: See attached Table	Analyze For: composite / homogenize	RUSH TAT (Pre-Schedule)	Standard TAT
MNS-Ø5	10/3/08	14:00	4		X		X						X							X	X	X		X

Special Instructions: Please remove shells from sample and homogenize soft tissue as previously discussed. Analyte table is attached to this COC. Temperature blank is enclosed ~~for~~ in cooler.

Method of Shipment: FEDEX

Relinquished by:	Date	Time	Received by:	Date	Time
Maren Anderson	10.03.08	1740	Yvonne Parry YVONNE PARRY	10/3/2008	1740
Relinquished by:	**Date**	**Time**	**Received by Laboratory:**	**Date**	**Time**
Yvonne Parry YVONNE PARRY	10/6/2008	1230	[illegible]	10-7-08	0945

Laboratory Comments:
Temperature Upon Receipt:
VOCs Free of Headspace? Y N

Laboratory Report

Tetra Tech, Inc.

Makua Shellfish Study

ARF 57201

Sampling Date: October 7, 2008

AMENDED PAGE

AGRICULTURE & PRIORITY POLLUTANTS LABORATORIES, INC.

4203 West Swift ∇ Fresno, California 93722 ∇ Phone 559-275-2175 ∇ Fax 559-275-4422

Case Narrative

ARF: 57201

Project: Makua Shellfish Study

State Certification Number: CA1312 (DW & WW)

NELAP Certification number: 05233CA (HW)

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sample Receipt Information:

The sample was received October 10, 2008, at 3.0°C. The sample was assigned Analytical Request Form (ARF) number 57201. The sample number and requested analyses were compared to the chain of custody. No exception was noted.

Sample Table

CLIENT ID	APPL ID	Matrix	Date Sampled	Date Received
NM-01-A	AX85339	MISC	10/07/08	10/10/08

There was insufficient volume to determine the percent moisture. The sample results are reported "as is" without moisture correction, as instructed.

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EPA Method 8330B
Energetics

Sample Preparation:

The tissue sample was extracted according to EPA 8330. All hold times were met.

Analysis:

The sample was analyzed according to EPA Method 8330B using an Agilent 1100 HPLC with UV detector.

Quality Control/Assurance:

Spike Recovery

A Laboratory Control Spike (LCS) was used for quality assurance. All acceptance criteria were met.

No sample was designated by the client for MS/MSD analysis. A

Method blanks:

No target analyte was detected at or above the MDL in the method blank.

Surrogates:

All surrogates had acceptable recoveries.

Calibration:

The initial and continuing calibrations and second source were analyzed according to the method. All calibration criteria were met.

Summary:

No analytical problem was encountered.

EPA Method 8270C
Semivolatile Organic Compounds

Sample Preparation:

The sample was extracted according to EPA method 3550B. All holding times were met.

Sample Analysis Information:

The sample was analyzed according to EPA Method 8270C using a Hewlett Packard GC/MS.

Quality Control/Assurance

Spike Recovery

A Laboratory Control Spike (LCS) was used for quality assurance. All spike recoveries were acceptable.

No sample was designated by the client for an MS/MSD analysis.

Method blanks

No target compound was detected at or above the method detection limit.

Surrogates

The sample recovered two surrogates outside their control limits: Phenol at 28.4% and Terphenyl-d14 at 151%. All surrogate recoveries were within control limits.

Calibration

The initial and continuing calibrations were performed according to the method. All method acceptance criteria were met.

Tuning:

The instrument was tuned using DFTPP. All method criteria were met.

Internal Standards

The internal standard area counts were compared to the mid-point of the initial calibration according to method 8270. All method criteria were met.

Summary:

No other problem was encountered. The data generated are acceptable.

EPA Methods 6020 and 7471A
Metals

Sample Preparation

The tissue sample was digested according to the EPA methods 3051, 3051A, and 7471A.

Analysis Information:

The sample was analyzed for total metals according to EPA method 6020 using a Perkin Elmer Elan 6100 ICP-MS and according to EPA method 7471A using a Perkin Elmer AAnalyst 300. The sample was analyzed twice undiluted; however the internal standards failed. The sample was then analyzed at a dilution factor of 1:5, and internal standard recoveries were acceptable. All holding times were met.

Quality Control/Assurance

Calibrations:

Calibrations were performed according to the methods for the initial calibration and the initial calibration verification. The initial calibration verification is prepared from a second source standard.

Blanks:

The method blanks and continuing calibration blanks were screened down to the method detection limits. No target metal was detected at concentrations greater than one-half the reporting limits.

Spikes:

Laboratory Control Spikes (LCS/LCSD) were used for quality assurance. All LCS recoveries met acceptance criteria.

No sample was designated by the client for an MS/MSD analysis.

Summary:

No analytical exception is noted. All data are acceptable.

EPA Method 8081A
Pesticides

Sample Preparation:

The sample was extracted according to EPA method 3550B. All holding times were met.

Analysis Information:

Samples:

The sample was analyzed for Pesticides according to EPA method 8081A using a Hewlett Packard GC equipped with an ECD.

Calibrations:

Initial and continuing calibrations were performed according to the method. All acceptance criteria were met.

Blanks:

No target analyte was detected above the reporting limit for the method blanks.

Spikes and Duplicates:

A Laboratory Control Spike (LCS) was used for quality assurance. All acceptance criteria were met.

No sample was designated by the client for an MS/MSD analysis.

Surrogates:

All surrogates recovered within acceptance limits.

Summary:

No analytical problem was encountered. The data generated are acceptable.

EPA Method 8290A
Dioxins/Furans by GC-HRMS

Sample Preparation:

The sample was extracted according to EPA method 3540C. The percent lipid content was determined using the procedures listed in EPA 8290. All holding times were met.

Sample Analysis Information:

The sample was analyzed according to EPA method 8290A using a Hewlett Packard Gas Chromatograph with a Waters AutoSpec High Resolution Mass Spectrometer detector.

Quality Control/Assurance

Calibrations:

Initial and continuing calibrations were performed according to the method. All calibration criteria were met.

Blanks:

Two analytes were detected in the method blank below the PQL, at J-value levels: 1.2.3.4.7.8.9-HpCDF (0.17 ng/kg) and 2.3.4.7.8-HxCDD (0.18 ng/kg). These analytes were not detected in the associated sample. No target analyte was detected above the reporting limits in the method blank.

Spikes:

A Laboratory Control Spike (LCS) was used for quality assurance. All acceptance criteria were met.

No sample was designated by the client for an MS/MSD analysis.

Surrogates

For the method blank, the 13C-2.3.7.8-TCDD surrogate recovered below the 40% control limit, at 24.1%. All of the sample surrogates recovered below the 40% lower control limit.

Summary:

No other problem was encountered.

EPA Method 8290A
Dioxins/Furans by GC-HRMS

Sample Preparation:

The sample was extracted according to EPA method 3540C. The percent lipid content was determined using the procedures listed in EPA 8290. All holding times were met.

Sample Analysis Information:

The sample was analyzed according to EPA method 8290A using a Hewlett Packard Gas Chromatograph with a Waters AutoSpec High Resolution Mass Spectrometer detector.

Quality Control/Assurance

Calibrations:

Initial and continuing calibrations were performed according to the method. All calibration criteria were met.

Blanks:

Two analytes were detected in the method blank below the PQL, at J-value levels: 1.2.3.4.7.8.9-HpCDF (0.17 ng/kg) and 2.3.4.7.8-HxCDD (0.18 ng/kg). These analytes were not detected in the associated sample. No target analyte was detected above the reporting limits in the method blank.

Spikes:

A Laboratory Control Spike (LCS) was used for quality assurance. All acceptance criteria were met.

No sample was designated by the client for an MS/MSD analysis.

Surrogates

For the method blank, the 13C-2.3.7.8-TCDD surrogate recovered below the 40% control limit, at 24.1%. All other surrogate recoveries were acceptable.

Summary:

No other problem was encountered.

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EPA Method 8260B
Volatile Organic Compounds

Preparation Information:

The fish tissue sample was purged according to EPA method 5035.

Analysis Information:

The samples were analyzed according to EPA method 8260B using a Hewlett Packard GC/MS.

Quality Control/Assurance

Spike Recoveries

Laboratory Control Spikes (LCS) were used for quality assurance. A second source standard was used for the LCS. All recoveries met acceptance criteria.

No sample was designated by the client for an MS/MSD analysis.

Method blanks

The blanks contained no target compound at or above reporting limits.

Surrogates

Undiluted, all four surrogates recovered outside their control limits in the sample: 1,2-DCA-d4 at 136%, 4-Bromofluorobenzene at 26.4%, Dibromofluoromethane at 129% and Toluene-d8 at 231%. All other recoveries were within acceptance limits.

Initial and Continuing Calibrations

Initial and continuing calibrations were analyzed according to the method. All acceptance criteria were met.

Internal Standards

Internal standard recoveries were checked against the mid-point of the initial calibrations. Undiluted, the sample had low internal standard recoveries. The sample was re-analyzed diluted with acceptable IS recoveries. Both sets of data are included.

Tuning:

The instrument was tuned using BFB. All method criteria were met.

Summary:

No other exception was noted.

EPA Method 314.0
Perchlorate

Sample Preparation:

The sample was prepared according to the method. All holding times were met.

Analysis Information:

The sample was analyzed according to the method using a Dionex DX500 ion chromatograph.

Quality Control/Assurance

Calibrations:

Calibrations were performed according to the method. The ICV is prepared from a second source standard.

Blanks:

The blank contained no Perchlorate at or above half the reporting limit.

Spikes:

Laboratory control spikes (LCS/LCSD) and matrix spike were used for quality assurance. All acceptance criteria were met.

Summary:

All data were acceptable. No analytical exception is noted.

CERTIFICATION

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC. Release of the hard copy has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

11/7/08

Leonard Fong, Ph.D, Laboratory Director / Date

EPA 8330A Explosives-Soil

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd

Project: Makua Shellfish Study

ARF: 57201

Sample ID: NM-01-A

APPL ID AX85339

Sample Collection Date: 10/07/08

QCG: $83TTS-081020A-127500

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8330	2,4-DNT	Not detected	0.50	0.083	mg/kg	10/20/08	10/31/08
EPA 8330	Nitroglycerine	Not detected	0.50	0.085	mg/kg	10/20/08	10/31/08
EPA 8330	RDX	Not detected	0.50	0.080	mg/kg	10/20/08	10/31/08
EPA 8330	Surrogate: 1,2-Dinitrobenzene (S)	119	70-130		%	10/20/08	10/31/08

Quant Method: E2_1021B.M
Run #: 1030_024.D
Instrument: UV1200
Sequence: 081021
Dilution Factor: 1
Initials: PY

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APPL-F1-SC-NoMC-REG MDLs

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Method Blank
EPA 8330A Explosives-Soil

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Blank Name/QCG: **081020S-85339 - 127500**
Batch ID: $83TTS-081020A

Sample Type	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
BLANK	2,4-DNT	Not detected	0.50	0.083	mg/kg	10/20/2008	10/30/2008
BLANK	Nitroglycerine	Not detected	0.50	0.085	mg/kg	10/20/2008	10/30/2008
BLANK	RDX	Not detected	0.50	0.080	mg/kg	10/20/2008	10/30/2008
BLANK	Surrogate: 1,2-Dinitrobenzene (S)	103	70-130		%	10/20/2008	10/30/2008

Quant Method: E2_1021B.M
Run #: 1030_004.D
Instrument: UV1200
Sequence: 081021
Initials: PY

GC SC-Blank-REG MDLs
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Laboratory Control Spike Recovery
EPA 8330A Explosives-Soil

APPL ID: **081020S-85339 LCS - 127500**
Batch ID: $83TTS-081020A

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits
2,4-DNT	1.16	1.05	90.5	80-125
Nitroglycerine	1.16	1.05	90.5	75-125
RDX	1.16	0.942	81.2	70-135
Surrogate: 1,2-Dinitrobenzene	1.16	0.854	73.6	70-130

Comments:

Primary	SPK
Quant Method :	E2_1021B.M
Extraction Date :	10/20/2008
Analysis Date :	10/31/2008
Instrument :	UV1200
Run :	1030_035.D
Initials :	PY

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APPL Standard LCS

EPA 8270C Soils

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd
Project: Makua Shellfish Study
Sample ID: NM-01-A
Sample Collection Date: 10/07/08

ARF: 57201
APPL ID AX85339
QCG: $8270S-081013A-126829

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8270C	Bis (2-ethylhexyl) phthalate	Not detected	330	61.6	ug/Kg	10/13/08	10/18/08
EPA 8270C	Di-n-butylphthalate	Not detected	330	65.9	ug/Kg	10/13/08	10/18/08
EPA 8270C	Di-n-octylphthalate	Not detected	330	58.4	ug/Kg	10/13/08	10/18/08
EPA 8270C	Diethyl phthalate	Not detected	330	62.1	ug/Kg	10/13/08	10/18/08
EPA 8270C	Pentachlorophenol	Not detected	330	58.7	ug/Kg	10/13/08	10/18/08
EPA 8270C	Pyrene	Not detected	330	54.1	ug/Kg	10/13/08	10/18/08
EPA 8270C	Surrogate: 2,4,6-Tribromophenol (S)	59.2	44-114		%	10/13/08	10/18/08
EPA 8270C	Surrogate: 2-Fluorbiphenyl (S)	67.3	39-116		%	10/13/08	10/18/08
EPA 8270C	Surrogate: 2-Fluorophenol (S)	49.5	48-118		%	10/13/08	10/18/08
EPA 8270C	Surrogate: Nitrobenzene-D5 (S)	65.1	49-142		%	10/13/08	10/18/08
EPA 8270C	Surrogate: Phenol (S)	28.4 #	47-122		%	10/13/08	10/18/08
EPA 8270C	Surrogate: Terphenyl-d14 (S)	151 #	40-135		%	10/13/08	10/18/08

= Recovery (or RPD) is outside QC limits.

Quant Method: Y8270D.M
Run #: 1018Y010
Instrument: YODA
Sequence: Y080912
Dilution Factor: 1
Initials: LF

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APPL-F1-SC-NoMC-REG MDLs

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Method Blank
EPA 8270C Soils

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Blank Name/QCG: **081013S-84606 - 126829**
Batch ID: $8270S-081013A

Sample Type	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
BLANK	Bis (2-ethylhexyl) phthalate	Not detected	330	61.6	ug/Kg	10/13/08	10/18/08
BLANK	Di-n-butylphthalate	Not detected	330	65.9	ug/Kg	10/13/08	10/18/08
BLANK	Di-n-octylphthalate	Not detected	330	58.4	ug/Kg	10/13/08	10/18/08
BLANK	Diethyl phthalate	Not detected	330	62.1	ug/Kg	10/13/08	10/18/08
BLANK	Pentachlorophenol	Not detected	330	58.7	ug/Kg	10/13/08	10/18/08
BLANK	Pyrene	Not detected	330	54.1	ug/Kg	10/13/08	10/18/08
BLANK	Surrogate: 2,4,6-Tribromophenol (S)	74.6	44-114		%	10/13/08	10/18/08
BLANK	Surrogate: 2-Fluorbiphenyl (S)	70.1	39-116		%	10/13/08	10/18/08
BLANK	Surrogate: 2-Fluorophenol (S)	72.2	48-118		%	10/13/08	10/18/08
BLANK	Surrogate: Nitrobenzene-D5 (S)	68.7	49-142		%	10/13/08	10/18/08
BLANK	Surrogate: Phenol (S)	73.9	47-122		%	10/13/08	10/18/08
BLANK	Surrogate: Terphenyl-d14 (S)	80.5	40-135		%	10/13/08	10/18/08

Quant Method: Y8270D.M
Run #: 1018Y003
Instrument: YODA
Sequence: Y080912
Initials: LF

GC SC-Blank-REG MDLs
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Laboratory Control Spike Recovery
EPA 8270C Soils

APPL ID: **081013S-84606 LCS - 126829**
Batch ID: $8270S-081013A

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level ug/Kg	SPK Result ug/Kg	SPK % Recovery	Recovery Limits
Bis (2-ethylhexyl) phthalate	1670	1570	94.0	38-148
Di-n-butylphthalate	1670	1370	82.0	36-151
Di-n-octylphthalate	1670	1540	92.2	51-139
Diethyl phthalate	1670	1370	82.0	51-126
Pentachlorophenol	1670	1270	76.0	32-150
Pyrene	1670	1490	89.2	45-137
Surrogate: 2,4,6-Tribromophenol	6670	5200	78.0	44-114
Surrogate: 2-Fluorbiphenyl	3330	2610	78.4	39-116
Surrogate: 2-Fluorophenol	6670	5300	79.5	48-118
Surrogate: Nitrobenzene-D5	3330	2500	75.1	49-142
Surrogate: Phenol	6670	5310	79.6	47-122
Surrogate: Terphenyl-d14	3330	2820	84.7	40-135

Comments:

Primary	SPK
Quant Method :	Y8270D.M
Extraction Date :	10/13/08
Analysis Date :	10/18/08
Instrument :	YODA
Run :	1018Y004
Initials :	LF

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APPL Standard LCS

Metals Results

ARF: 57201

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

Attn: Gary Floyd

Method	Analyte	Result	PQL	MDL	Units	DF	Prep Date	Analysis Date
APPL ID: AX85339 -Client Sample ID: NM-01-A			-Sample Collection Date: 10/07/08				Project: Makua Shellfish Study	
6020	Aluminum (Al)	39.7	10.0	0.30	mg/Kg	5	10/16/08	10/23/08
6020	Antimony (Sb)	Not detected	0.5	0.15	mg/Kg	5	10/16/08	10/22/08
6020	Arsenic (As)	3.9	2.5	0.40	mg/Kg	5	10/16/08	10/22/08
6020	Barium (Ba)	14.5	0.5	0.20	mg/Kg	5	10/16/08	10/22/08
6020	Beryllium (Be)	Not detected	5.0	0.35	mg/Kg	5	10/16/08	10/23/08
6020	Cadmium (Cd)	Not detected	0.5	0.15	mg/Kg	5	10/16/08	10/22/08
6020	Chromium (Cr)	1.2 J	2.5	0.10	mg/Kg	5	10/16/08	10/23/08
6020	Cobalt (Co)	0.28 J	0.5	0.10	mg/Kg	5	10/16/08	10/23/08
6020	Copper (Cu)	65.7	0.5	0.20	mg/Kg	5	10/16/08	10/22/08
6020	Iron (Fe)	80.4	50.0	15.00	mg/Kg	5	10/16/08	10/23/08
6020	Lead (Pb)	Not detected	0.5	0.10	mg/Kg	5	10/16/08	10/22/08
6020	Manganese (Mn)	32.4	0.5	0.25	mg/Kg	5	10/16/08	10/23/08
6020	Selenium (Se)	1.7	1.0	0.20	mg/Kg	5	10/16/08	10/22/08
6020	Silver (Ag)	0.24 J	0.5	0.10	mg/Kg	5	10/16/08	10/22/08
6020	Thallium (Tl)	Not detected	0.5	0.10	mg/Kg	5	10/16/08	10/22/08
6020	Vanadium (V)	0.31 J	0.5	0.10	mg/Kg	5	10/16/08	10/23/08
6020	Zinc (Zn)	485	10.0	0.65	mg/Kg	5	10/16/08	10/22/08
7471A	Mercury	Not detected	0.1	0.02	mg/Kg	1	10/13/08	10/14/08

J = Estimated value.

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METALS BLANK

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Method	Analyte	Result	PQL	MDL	Units	Prep Date	Analysis Date	QC Group
6020	Antimony (Sb)	Not detected	0.1	0.03	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Arsenic (As)	Not detected	0.5	0.08	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Barium (Ba)	Not detected	0.1	0.04	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Cadmium (Cd)	Not detected	0.1	0.03	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Copper (Cu)	Not detected	0.1	0.04	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Lead (Pb)	Not detected	0.1	0.02	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Selenium (Se)	Not detected	0.2	0.04	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Silver (Ag)	Not detected	0.1	0.02	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Thallium (Tl)	Not detected	0.1	0.02	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Zinc (Zn)	0.45 J	2.0	0.13	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Aluminum (Al)	0.39 J	2.0	0.06	mg/Kg	10/16/08	10/23/08	$6020S-081016A1-AX84606
6020	Beryllium (Be)	Not detected	1.0	0.07	mg/Kg	10/16/08	10/23/08	$6020S-081016A1-AX84606
6020	Chromium (Cr)	Not detected	0.5	0.02	mg/Kg	10/16/08	10/23/08	$6020S-081016A1-AX84606
6020	Cobalt (Co)	Not detected	0.1	0.02	mg/Kg	10/16/08	10/23/08	$6020S-081016A1-AX84606
6020	Iron (Fe)	Not detected	10.0	2.91	mg/Kg	10/16/08	10/23/08	$6020S-081016A1-AX84606
6020	Manganese (Mn)	Not detected	0.1	0.05	mg/Kg	10/16/08	10/23/08	$6020S-081016A1-AX84606
6020	Vanadium (V)	Not detected	0.1	0.02	mg/Kg	10/16/08	10/23/08	$6020S-081016A1-AX84606
7471A	Mercury	Not detected	0.1	0.02	mg/Kg	10/13/08	10/14/08	$HG-S-081013A2-AX85339

Metals SC-Blank-REG MDLs
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Laboratory Control Spike Recoveries

METALS

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Method	Compound Name	Spike Lvl mg/Kg	SPK Res mg/Kg	DUP Res mg/Kg	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
6020	Aluminum (Al)	400	394	423	98.5	106	7.1	20	80-120	10/16/08	10/23/08	10/16/08	10/23/08	$6020S-081016A1-AX8460
6020	Antimony (Sb)	50.0	54.7	56.9	109	114	3.9	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Arsenic (As)	50.0	51.2	53.6	102	107	4.6	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Barium (Ba)	50.0	54.1	54.4	108	109	0.6	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Beryllium (Be)	10.00	10.4	10.5	104	105	1.0	20	80-120	10/16/08	10/23/08	10/16/08	10/23/08	$6020S-081016A1-AX8460
6020	Cadmium (Cd)	10.00	10.5	10.7	105	107	1.9	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Chromium (Cr)	50.0	51.5	51.8	103	104	0.6	20	80-120	10/16/08	10/23/08	10/16/08	10/23/08	$6020S-081016A1-AX8460
6020	Cobalt (Co)	50.0	48.1	48.8	96.2	97.6	1.4	20	80-120	10/16/08	10/23/08	10/16/08	10/23/08	$6020S-081016A1-AX8460
6020	Copper (Cu)	50.0	52.6	55.3	105	111	5.0	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Iron (Fe)	200	193	194	96.5	97.0	0.5	20	80-120	10/16/08	10/23/08	10/16/08	10/23/08	$6020S-081016A1-AX8460
6020	Lead (Pb)	50.0	53.2	54.1	106	108	1.7	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Manganese (Mn)	50.0	48.4	50.1	96.8	100	3.5	20	80-120	10/16/08	10/23/08	10/16/08	10/23/08	$6020S-081016A1-AX8460
6020	Selenium (Se)	50.0	53.2	55.7	106	111	4.6	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Silver (Ag)	20.0	19.5	19.9	97.5	99.5	2.0	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Thallium (Tl)	50.0	56.7	56.7	113	113	0.0	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Vanadium (V)	50.0	51.7	53.3	103	107	3.0	20	80-120	10/16/08	10/23/08	10/16/08	10/23/08	$6020S-081016A1-AX8460
6020	Zinc (Zn)	100.0	105	109	105	109	3.7	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
EPA 7471A	Mercury	0.667	0.67	0.67	100	100	0.0	20	80-120	10/13/08	10/14/08	10/13/08	10/14/08	$HG-S-081013A2-AX85339

Comments: _____

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APPL Standard LCSD

EPA 8081A SOIL

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd

Project: Makua Shellfish Study

ARF: 57201

Sample ID: NM-01-A

APPL ID AX85339

Sample Collection Date: 10/07/08

QCG: $88SS-081013A-126809

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8081A	4,4'-DDT	Not detected	5.0	0.40	ug/Kg	10/13/08	10/17/08
EPA 8081A	a-BHC	Not detected	5.0	1.00	ug/Kg	10/13/08	10/17/08
EPA 8081A	Aldrin	Not detected	5.0	1.40	ug/Kg	10/13/08	10/17/08
EPA 8081A	b-BHC	Not detected	5.0	1.00	ug/Kg	10/13/08	10/17/08
EPA 8081A	d-BHC	Not detected	5.0	1.10	ug/Kg	10/13/08	10/17/08
EPA 8081A	g-BHC (Lindane)	Not detected	5.0	0.90	ug/Kg	10/13/08	10/17/08
EPA 8081A	Heptachlor	Not detected	5.0	1.10	ug/Kg	10/13/08	10/17/08
EPA 8081A	Heptachlor epoxide	Not detected	5.0	1.10	ug/Kg	10/13/08	10/17/08
EPA 8081A	Surrogate: Decachlorobiphenyl (S)	88.9	29-125		%	10/13/08	10/17/08
EPA 8081A	Surrogate: TCmX (S)	107	40-123		%	10/13/08	10/17/08

Quant Method: OCLB.M
Run #: 0930264
Instrument: Ethel
Sequence: 080930
Dilution Factor: 1
Initials: MA

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APPL-F1-SC-NoMC-REG MDLs

AMENDED PAGE

Method Blank
EPA 8081A SOIL

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Blank Name/QCG: **081013S-84606 - 126809**
Batch ID: $88SS-081013A

Sample Type	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
BLANK	4,4'-DDT	Not detected	5.0	0.40	ug/Kg	10/13/08	10/17/08
BLANK	a-BHC	Not detected	5.0	1.00	ug/Kg	10/13/08	10/17/08
BLANK	Aldrin	Not detected	5.0	1.40	ug/Kg	10/13/08	10/17/08
BLANK	b-BHC	Not detected	5.0	1.00	ug/Kg	10/13/08	10/17/08
BLANK	d-BHC	Not detected	5.0	1.10	ug/Kg	10/13/08	10/17/08
BLANK	g-BHC (Lindane)	Not detected	5.0	0.90	ug/Kg	10/13/08	10/17/08
BLANK	Heptachlor	Not detected	5.0	1.10	ug/Kg	10/13/08	10/17/08
BLANK	Heptachlor epoxide	Not detected	5.0	1.10	ug/Kg	10/13/08	10/17/08
BLANK	Surrogate: Decachlorobiphenyl (S)	75.1	29-125		%	10/13/08	10/17/08
BLANK	Surrogate: TCmX (S)	68.1	40-123		%	10/13/08	10/17/08

Quant Method: OCLB.M
Run #: 0930257
Instrument: Ethel
Sequence: 080930
Initials: MA

GC SC-Blank-REG MDLs
Printed: 10/20/08 3:19:19 PM

Laboratory Control Spike Recovery
EPA 8081A SOIL

APPL ID: **081013S-84606 LCS - 126809**
Batch ID: $88SS-081013A

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level ug/Kg	SPK Result ug/Kg	SPK % Recovery	Recovery Limits
4,4'-DDT	333	260	78.1	47-120
a-BHC	333	256	76.9	41-114
Aldrin	333	262	78.7	40-108
b-BHC	333	283	85.0	63-129
d-BHC	333	280	84.1	52-105
g-BHC (Lindane)	333	268	80.5	46-114
Heptachlor	333	258	77.5	48-115
Heptachlor epoxide	333	268	80.5	61-110
Surrogate: Decachlorobiphenyl	333	261	78.4	29-125
Surrogate: TCmX	333	157	47.1	40-123

Comments:

Primary	SPK
Quant Method :	OCLB.M
Extraction Date :	10/13/08
Analysis Date :	10/17/08
Instrument :	Ethel
Run :	0930258
Initials :	MA

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APPL Standard LCS

EPA 8290 - Dioxins and Furans

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd
Project: Makua Shellfish Study
Sample ID: NM-01-A
Sample Collection Date: 10/07/08

ARF: 57201
APPL ID AX85339
QCG: $829ET27S-081010-1272

Method	Analyte	Result	EDL / EMPC	Units	Extraction Date	Analysis Date
EPA 8290	1,2,3,4,6,7,8-heptachloro-dibenzofuran	Not detected	5.7	ng/kg	10/10/08	10/23/08
EPA 8290	1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxi	1.2 J	NA	ng/kg	10/10/08	10/23/08
EPA 8290	1,2,3,4,7,8,9-heptachloro-dibenzofuran	Not detected	0.049	ng/kg	10/10/08	10/23/08
EPA 8290	1,2,3,4,7,8-hexachloro-dibenzofuran	Not detected	0.2	ng/kg	10/10/08	10/23/08
EPA 8290	1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	Not detected	0.18	ng/kg	10/10/08	10/23/08
EPA 8290	1,2,3,6,7,8-hexachloro-dibenzofuran	2.2 J	NA	ng/kg	10/10/08	10/23/08
EPA 8290	1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	0.50 J	NA	ng/kg	10/10/08	10/23/08
EPA 8290	1,2,3,7,8,9-hexachloro-dibenzofuran	Not detected	0.13	ng/kg	10/10/08	10/23/08
EPA 8290	1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	Not detected	0.27	ng/kg	10/10/08	10/23/08
EPA 8290	1,2,3,7,8-pentachloro-dibenzofuran	Not detected	0.15	ng/kg	10/10/08	10/23/08
EPA 8290	1,2,3,7,8-pentachlorodibenzo-p-dioxin	Not detected	0.49	ng/kg	10/10/08	10/23/08
EPA 8290	2,3,4,6,7,8-hexachloro-dibenzofuran	Not detected	16	ng/kg	10/10/08	10/23/08
EPA 8290	2,3,4,7,8-pentachloro-dibenzofuran	Not detected	0.24	ng/kg	10/10/08	10/23/08
EPA 8290	2,3,7,8-tetrachloro-dibenzofuran	0.46 J	NA	ng/kg	10/10/08	10/23/08
EPA 8290	2,3,7,8-tetrachlorodibenzo-p-dioxin	Not detected	0.33	ng/kg	10/10/08	10/23/08
EPA 8290	octachloro-dibenzofuran	Not detected	0.055	ng/kg	10/10/08	10/23/08
EPA 8290	octachlorodibenzo-p-dioxin	7.1	NA	ng/kg	10/10/08	10/23/08
EPA 8290	TCDD, total	Not detected	4.1	ng/kg	10/10/08	10/23/08
EPA 8290	TCDF, total	1.3 J	NA	ng/kg	10/10/08	10/23/08
EPA 8290	Surrogate: 13C-1,2,3,4,6,7,8-HpCDD (S)	65.6	40-135	%	10/10/08	10/23/08
EPA 8290	Surrogate: 13C-1,2,3,4,6,7,8-HpCDF (S)	70.4	40-135	%	10/10/08	10/23/08
EPA 8290	Surrogate: 13C-1,2,3,4,7,8-HxCDF (S)	63.2	40-135	%	10/10/08	10/23/08
EPA 8290	Surrogate: 13C-1,2,3,6,7,8-HxCDD (S)	58.2	40-135	%	10/10/08	10/23/08
EPA 8290	Surrogate: 13C-1,2,3,7,8-PeCDD (S)	46.1	40-135	%	10/10/08	10/23/08
EPA 8290	Surrogate: 13C-1,2,3,7,8-PeCDF (S)	50.9	40-135	%	10/10/08	10/23/08
EPA 8290	Surrogate: 13C-2,3,7,8-TCDD (S)	47.1	40-135	%	10/10/08	10/23/08
EPA 8290	Surrogate: 13C-2,3,7,8-TCDF (S)	58.2	40-135	%	10/10/08	10/23/08
EPA 8290	Surrogate: 13C-OCDD (S)	58.6	40-135	%	10/10/08	10/23/08

J = Estimated value.

Quant Method: 8290_081014
Run #: 081022_HR_20
Instrument: Magneto
Sequence: 081022
Dilution Factor: 1
Initials: RP

AMENDED PAGE

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Form 1 - APPL Standard GC - No MC

Lipid

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd
Project: Makua Shellfish Study
Sample ID: NM-01-A
Sample Collection Date: 10/07/08

ARF: 57201
APPL ID AX85339
QCG: $LIPID-081010A-127440

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
%Lipid	Lipids	1.7	NA	%	10/10/08	10/13/08

Quant Method:	NA
Run #:	NA
Instrument:	NA
Sequence:	NA
Dilution Factor:	1
Initials:	RP

AMENDED PAGE

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Form 1 - APPL Standard GC - No MC

Method Blank

EPA 8290 - Dioxins and Furans

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Blank Name/QCG: **081010S-84606 - 127202**
Batch ID: $829ET27S-081010

Sample Type	Analyte	Result	EDL / EMPC	Units	Extraction Date	Analysis Date
BLANK	1,2,3,4,6,7,8-heptachloro-dibenzofuran	Not detected	0.042	ng/kg	10/10/08	10/23/08
BLANK	1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxi	Not detected	0.26	ng/kg	10/10/08	10/23/08
BLANK	1,2,3,4,7,8,9-heptachloro-dibenzofuran	0.17 J	NA	ng/kg	10/10/08	10/23/08
BLANK	1,2,3,4,7,8-hexachloro-dibenzofuran	Not detected	0.12	ng/kg	10/10/08	10/23/08
BLANK	1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	0.18 J	NA	ng/kg	10/10/08	10/23/08
BLANK	1,2,3,6,7,8-hexachloro-dibenzofuran	Not detected	0.074	ng/kg	10/10/08	10/23/08
BLANK	1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	Not detected	0.064	ng/kg	10/10/08	10/23/08
BLANK	1,2,3,7,8,9-hexachloro-dibenzofuran	Not detected	0.044	ng/kg	10/10/08	10/23/08
BLANK	1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	Not detected	0.085	ng/kg	10/10/08	10/23/08
BLANK	1,2,3,7,8-pentachloro-dibenzofuran	Not detected	0.061	ng/kg	10/10/08	10/23/08
BLANK	1,2,3,7,8-pentachlorodibenzo-p-dioxin	Not detected	0.11	ng/kg	10/10/08	10/23/08
BLANK	2,3,4,6,7,8-hexachloro-dibenzofuran	Not detected	0.15	ng/kg	10/10/08	10/23/08
BLANK	2,3,4,7,8-pentachloro-dibenzofuran	Not detected	0.027	ng/kg	10/10/08	10/23/08
BLANK	2,3,7,8-tetrachloro-dibenzofuran	Not detected	0.26	ng/kg	10/10/08	10/23/08
BLANK	2,3,7,8-tetrachlorodibenzo-p-dioxin	Not detected	0.26	ng/kg	10/10/08	10/23/08
BLANK	octachloro-dibenzofuran	Not detected	0.016	ng/kg	10/10/08	10/23/08
BLANK	octachlorodibenzo-p-dioxin	Not detected	1.3	ng/kg	10/10/08	10/23/08
BLANK	TCDD, total	Not detected	3.8	ng/kg	10/10/08	10/23/08
BLANK	TCDF, total	Not detected	1.9	ng/kg	10/10/08	10/23/08
BLANK	Surrogate: 13C-1,2,3,4,6,7,8-HpCDD (S)	74.8	40-135	%	10/10/08	10/23/08
BLANK	Surrogate: 13C-1,2,3,4,6,7,8-HpCDF (S)	71.8	40-135	%	10/10/08	10/23/08
BLANK	Surrogate: 13C-1,2,3,4,7,8-HxCDF (S)	63.7	40-135	%	10/10/08	10/23/08
BLANK	Surrogate: 13C-1,2,3,6,7,8-HxCDD (S)	61.1	40-135	%	10/10/08	10/23/08
BLANK	Surrogate: 13C-1,2,3,7,8-PeCDD (S)	52.5	40-135	%	10/10/08	10/23/08
BLANK	Surrogate: 13C-1,2,3,7,8-PeCDF (S)	59.5	40-135	%	10/10/08	10/23/08
BLANK	Surrogate: 13C-2,3,7,8-TCDD (S)	24.1 #	40-135	%	10/10/08	10/23/08
BLANK	Surrogate: 13C-2,3,7,8-TCDF (S)	61.8	40-135	%	10/10/08	10/23/08
BLANK	Surrogate: 13C-OCDD (S)	65.8	40-135	%	10/10/08	10/23/08

J = Estimated value.
# = Recovery (or RPD) is outside QC limits.

Quant Method: 8290_081014
Run #: 081022_HR_09
Instrument: Magneto
Sequence: 081022
Initials: RP

Printed: 11/07/08 5:36:53 PM

Laboratory Control Spike Recoveries

EPA 8290 - Dioxins and Furans

APPL ID: **081010S-84606 LCS - 127202**
Batch ID: $829ET27S-081010

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Lvl ng/kg	SPK Result ng/kg	DUP Result ng/kg	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1,2,3,4,6,7,8-heptachloro-dibenzofuran	125	129	131	103	105	70-130	1.5	30
1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxi	125	117	128	93.6	102	70-130	9.0	30
1,2,3,4,7,8,9-heptachloro-dibenzofuran	125	118	118	94.4	94.4	70-130	0.0	30
1,2,3,4,7,8-hexachloro-dibenzofuran	125	133	133	106	106	70-130	0.0	30
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	125	132	134	106	107	70-130	1.5	30
1,2,3,6,7,8-hexachloro-dibenzofuran	125	131	141	105	113	70-130	7.4	30
1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	125	136	137	109	110	70-130	0.73	30
1,2,3,7,8,9-hexachloro-dibenzofuran	125	133	138	106	110	70-130	3.7	30
1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	125	138	147	110	118	70-130	6.3	30
1,2,3,7,8-pentachloro-dibenzofuran	125	142	143	114	114	70-130	0.70	30
1,2,3,7,8-pentachlorodibenzo-p-dioxin	125	127	129	102	103	70-130	1.6	30
2,3,4,6,7,8-hexachloro-dibenzofuran	125	141	131	113	105	70-130	7.4	30
2,3,4,7,8-pentachloro-dibenzofuran	125	130	127	104	102	70-130	2.3	30
2,3,7,8-tetrachloro-dibenzofuran	50.0	54.1	53.0	108	106	70-130	2.1	30
2,3,7,8-tetrachlorodibenzo-p-dioxin	50.0	53.1	53.9	106	108	70-130	1.5	30
octachloro-dibenzofuran	250	253	265	101	106	70-130	4.6	30
octachlorodibenzo-p-dioxin	250	256	270	102	108	70-130	5.3	30
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	625	450	438	72.0	70.1	40-135		
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	625	435	438	69.6	70.1	40-135		
Surrogate: 13C-1,2,3,4,7,8-HxCDF	625	403	400	64.5	64.0	40-135		
Surrogate: 13C-1,2,3,6,7,8-HxCDD	625	392	370	62.7	59.2	40-135		
Surrogate: 13C-1,2,3,7,8-PeCDD	250	141	146	56.4	58.4	40-135		
Surrogate: 13C-1,2,3,7,8-PeCDF	250	148	152	59.2	60.8	40-135		
Surrogate: 13C-2,3,7,8-TCDD	250	154	145	61.6	58.0	40-135		

Comments:

Primary	SPK	DUP
Quant Method :	8290_081014	8290_081014
Extraction Date :	10/10/2008	10/10/2008
Analysis Date :	10/22/2008	10/23/2008
Instrument :	Magneto	Magneto
Run :	081022_HR_06	081022_HR_07
Initials :	RP	

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APPL Standard LCSD

Laboratory Control Spike Recoveries
EPA 8290 - Dioxins and Furans

APPL ID: **081010S-84606 LCS - 127202**
Batch ID: $829ET27S-081010

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Lvl ng/kg	SPK Result ng/kg	DUP Result ng/kg	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
Surrogate: 13C-2,3,7,8-TCDF	250	166	164	66.4	65.6	40-135		
Surrogate: 13C-OCDD	1250	863	863	69.0	69.0	40-135		

Comments:

Primary	SPK	DUP
Quant Method :	8290_081014	8290_081014
Extraction Date :	10/10/2008	10/10/2008
Analysis Date :	10/22/2008	10/23/2008
Instrument :	Magneto	Magneto
Run :	081022_HR_06	081022_HR_07
Initials :	RP	

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APPL Standard LCSD

EPA 8260B MEOH

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd

Project: Makua Shellfish Study

ARF: 57201

Sample ID: NM-01-A

APPL ID AX85339

Sample Collection Date: 10/07/08

QCG: $8260S-081013AC-127239

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B-	1,2,4-Trimethylbenzene	Not detected	25.0	9.50	ug/Kg	10/13/08	10/13/08
EPA 8260B-	Ethyl benzene	Not detected	25.0	11.50	ug/Kg	10/13/08	10/13/08
EPA 8260B-	Styrene	Not detected	25.0	12.50	ug/Kg	10/13/08	10/13/08
EPA 8260B-	Toluene	Not detected	25.0	8.50	ug/Kg	10/13/08	10/13/08
EPA 8260B-	Xylenes	Not detected	25.0	9.50	ug/Kg	10/13/08	10/13/08
EPA 8260B-	Surrogate: 1,2-Dichloroethane-d4 (S)	110	70-125		%	10/13/08	10/13/08
EPA 8260B-	Surrogate: 4-Bromofluorobenzene (S)	76.4	72-133		%	10/13/08	10/13/08
EPA 8260B-	Surrogate: Dibromofluoromethane (S)	103	78-125		%	10/13/08	10/13/08
EPA 8260B-	Surrogate: Toluene-D8 (S)	121	73-124		%	10/13/08	10/13/08

Quant Method: C86DODW.M
Run #: 1013C07
Instrument: Chico
Sequence: C081012
Dilution Factor: 50
Initials: DG

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APPL-F1-SC-NoMC-REG MDLs

AMENDED PAGE

EPA 8260B Soil

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd
Project: Makua Shellfish Study
Sample ID: NM-01-A
Sample Collection Date: 10/07/08

ARF: 57201
APPL ID AX85339
QCG: $8260S-081013AM-127238

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	5.0	1.18	ug/Kg	10/13/08	10/13/08
EPA 8260B	Ethylbenzene	Not detected	5.0	0.64	ug/Kg	10/13/08	10/13/08
EPA 8260B	Styrene	Not detected	5.0	0.69	ug/Kg	10/13/08	10/13/08
EPA 8260B	Toluene	Not detected	5.0	0.65	ug/Kg	10/13/08	10/13/08
EPA 8260B	Xylenes	Not detected	5.0	0.68	ug/Kg	10/13/08	10/13/08
EPA 8260B	Surrogate: 1,2-Dichloroethane-d4 (S)	136 #	59-120		%	10/13/08	10/13/08
EPA 8260B	Surrogate: 4-Bromofluorobenzene (S)	26.4 #	82-121		%	10/13/08	10/13/08
EPA 8260B	Surrogate: Dibromofluoromethane (S)	129 #	74-122		%	10/13/08	10/13/08
EPA 8260B	Surrogate: Toluene-D8 (S)	231 #	71-127		%	10/13/08	10/13/08

= Recovery (or RPD) is outside QC limits.

Quant Method: M86DODSM.M
Run #: 1013M14
Instrument: Max
Sequence: M081009
Dilution Factor: 1
Initials: DG

Printed: 11/10/08 8:42:09 AM
APPL-F1-SC-NoMC-REG MDLs

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Method Blank
EPA 8260B Soil

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Blank Name/QCG: **081013S-85339 - 127238**
Batch ID: $8260S-081013AM

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	1,2,4-Trimethylbenzene	Not detected	5.0	ug/Kg	10/13/08	10/13/08
BLANK	Ethylbenzene	Not detected	5.0	ug/Kg	10/13/08	10/13/08
BLANK	Styrene	Not detected	5.0	ug/Kg	10/13/08	10/13/08
BLANK	Toluene	Not detected	5.0	ug/Kg	10/13/08	10/13/08
BLANK	Xylenes	Not detected	5.0	ug/Kg	10/13/08	10/13/08
BLANK	Surrogate: 1,2-Dichloroethane-d4 (S)	89.9	59-120	%	10/13/08	10/13/08
BLANK	Surrogate: 4-Bromofluorobenzene (S)	101	82-121	%	10/13/08	10/13/08
BLANK	Surrogate: Dibromofluoromethane (S)	91.3	74-122	%	10/13/08	10/13/08
BLANK	Surrogate: Toluene-D8 (S)	102	71-127	%	10/13/08	10/13/08

Quant Method: M86DODSM.M
Run #: 1013M06
Instrument: Max
Sequence: M081009
Initials: DG

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Method Blank
EPA 8260B MEOH

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Blank Name/QCG: **081013S-85339 - 127239**
Batch ID: $8260S-081013AC

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	1,2,4-Trimethylbenzene	Not detected	25.0	ug/Kg	10/13/08	10/13/08
BLANK	Ethyl benzene	Not detected	25.0	ug/Kg	10/13/08	10/13/08
BLANK	Styrene	Not detected	25.0	ug/Kg	10/13/08	10/13/08
BLANK	Toluene	Not detected	25.0	ug/Kg	10/13/08	10/13/08
BLANK	Xylenes	Not detected	25.0	ug/Kg	10/13/08	10/13/08
BLANK	Surrogate: 1,2-Dichloroethane-d4 (S)	100	70-125	%	10/13/08	10/13/08
BLANK	Surrogate: 4-Bromofluorobenzene (S)	109	72-133	%	10/13/08	10/13/08
BLANK	Surrogate: Dibromofluoromethane (S)	95.3	78-125	%	10/13/08	10/13/08
BLANK	Surrogate: Toluene-D8 (S)	112	73-124	%	10/13/08	10/13/08

Quant Method: C86DODW.M
Run #: 1013C05
Instrument: Chico
Sequence: C081012
Initials: DG

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Laboratory Control Spike Recovery
EPA 8260B Soil

APPL ID: **081013S-85339 LCS - 127238**
Batch ID: $8260S-081013AM

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level ug/Kg	SPK Result ug/Kg	SPK % Recovery	Recovery Limits
1,2,4-Trimethylbenzene	50.0	55.5	111	65-135
Ethylbenzene	50.0	54.3	109	78-127
Styrene	50.0	56.4	113	65-135
Toluene	50.0	54.8	110	60-135
Xylenes	150	162	108	70-135
Surrogate: 1,2-Dichloroethane-d4	41.4	38.9	94.0	59-120
Surrogate: 4-Bromofluorobenzene	42.4	42.2	99.6	82-121
Surrogate: Dibromofluoromethane	42.0	40.2	95.7	74-122
Surrogate: Toluene-D8	43.7	42.0	96.2	71-127

Comments:

Primary	SPK
Quant Method :	M86DODSM.M
Extraction Date :	10/13/08
Analysis Date :	10/13/08
Instrument :	Max
Run :	1013M02
Initials :	DG

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APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8260B MEOH

APPL ID: **081013S-85339 LCS - 127239**
Batch ID: $8260S-081013AC

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level ug/Kg	SPK Result ug/Kg	SPK % Recovery	Recovery Limits
1,2,4-Trimethylbenzene	500	534	107	65-135
Ethyl benzene	500	534	107	70-123
Styrene	500	564	113	65-135
Toluene	500	535	107	69-122
Xylenes	1500	1580	105	73-145
Surrogate: 1,2-Dichloroethane-d4	17.6	18.1	103	70-125
Surrogate: 4-Bromofluorobenzene	16.7	17.4	104	72-133
Surrogate: Dibromofluoromethane	19.1	18.5	97.0	78-125
Surrogate: Toluene-D8	18.6	19.0	102	73-124

Comments: _____

Primary	SPK
Quant Method :	C86DODW.M
Extraction Date :	10/13/08
Analysis Date :	10/13/08
Instrument :	Chico
Run :	1013C04
Initials :	DG

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APPL Standard LCS

Wetlab Results

ARF: 57201

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

Attn: Gary Floyd

Method	Analyte	Result	PQL	MDL	Units	Prep Date	Analysis Date
APPL ID: AX85339	-Client Sample ID: NM-01-A		-Sample Collection Date: 10/07/08			Project: Makua Shellfish Study	
EPA 314.0	Perchlorate in Solids	Not detected	1500	21.0	ug/Kg	10/14/08	10/21/08

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WETLAB BLANK

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Method	Analyte	Result	PQL	Units	Prep Date	Anal Date	QC Group
EPA 314.0	Perchlorate in Solids	Not detected	30.0	ug/Kg	10/14/08	10/15/08	$314S-081014A-AX85017

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Laboratory Control Spike Recoveries

WETLAB

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Method	Compound Name	Spike Lvl ug/Kg	SPK Res ug/Kg	DUP Res ug/Kg	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 314.0	Perchlorate in Solids	100.0	102	102	102	102	0.0	15	85-115	10/14/08	10/15/08	10/14/08	10/15/08	$314S-081014A-AX85017

Comments: _____

Printed: 10/24/08 2:57:53 PM
APPL Standard LCSD

CHAIN-OF-CUSTODY RECORD

TETRA TECH

Client Name/Account #: TetraTech, Inc.
Address: 737 Bishop St., Suite 3020
City/State/Zip: Honolulu, HI 96813
Project Manager: Gary Floyd
Telephone Number: (808)533-3366 **Fax No.:** (808)533-3306
Sampler Name: (Print) Maren Anderson
Sampler Signature: Maren Anderson

Report To: Gary Floyd, Susan Carstenn, Yvonne Parry
Invoice To: Yvonne Parry
Project ID: Makua Shellfish Study
Project #: 100-SFO-T95M78

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Multi-incremental Sample	Preservative: Ice	Preservative: HNO_3 (Red Label)	Preservative: HCl (Blue Label)	Preservative: NaOH (Orange Label)	Preservative: H_2SO_4 Plastic (Yellow Label)	Preservative: H_2SO_4 Glass(Yellow Label)	Preservative: None (Black Label)	Preservative: Other (Specify)	Matrix: Groundwater	Matrix: Wastewater	Matrix: Drinking Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify):	Analyze For: See attached Table	Analyze For: homogenize	RUSH TAT (Pre-Schedule)	Standard TAT
NM-01	10/7/08	1442	1		X		X						X							X	X	X		X

Special Instructions: ~~Please homogenize the sample the shell does not h~~ yet
Please homogenize the sample **including** the shells.
A temp blank is included in the cooler

Method of Shipment: FEDEX

Laboratory Comments:
Temperature Upon Receipt:
VOCs Free of Headspace? Y N

Relinquished by:	Date	Time	Received by:	Date	Time
Maren Anderson	10.08.08	1700	Yvonne Parry (YVONNE PARRY)	10.08.08	1700
Relinquished by:	Date	Time	Received by Laboratory:	Date	Time
Yvonne Parry	10.09.08	10:00	[illegible]	10.10.08	0950

Laboratory Report

Tetra Tech, Inc.

Makua Shellfish Study

ARF 57221

Sampling Date: October 6, 7, and 9, 2008

AMENDED PAGE

AGRICULTURE & PRIORITY POLLUTANTS LABORATORIES, INC.

4203 West Swift ∇ Fresno, California 93722 ∇ Phone 559-275-2175 ∇ Fax 559-275-4422

Case Narrative

ARF: 57221

Project: Makua Shellfish Study

State Certification Number: CA1312 (DW & WW)

NELAP Certification number: 05233CA (HW)

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sample Receipt Information:

The sample was received October 14, 2008, at 2.0°C. The sample was assigned Analytical Request Form (ARF) number 57221. The sample number and requested analyses were compared to the chain of custody. No exception was noted.

Sample Table

CLIENT ID	APPL ID	Matrix	Date Sampled	Date Received
MSM-01	AX85520	MISC	10/09/08	10/14/08
MSM-02	AX85521	MISC	10/09/08	10/14/08
NM-01	AX85522	MISC	10/06/08	10/14/08
NM-02	AX85523	MISC	10/07/08	10/14/08

Percent moisture was determined using CLP 4.0. The sample results are reported "as is" without moisture correction, as instructed.

EPA Method 8330B
Energetics

Sample Preparation:

The tissue samples were extracted according to EPA 8330. All hold times were met.

Analysis:

The samples were analyzed according to EPA Method 8330B using an Agilent 1100 HPLC with UV detector.

Quality Control/Assurance:

Spike Recovery

Laboratory Control Spikes (LCS) were used for quality assurance. All acceptance criteria were met.

No sample was designated by the client for MS/MSD analysis. A

Method blanks:

No target analyte was detected at or above the MDL in the method blanks.

Surrogates:

All surrogates had acceptable recoveries.

Calibration:

The initial and continuing calibrations and second source were analyzed according to the method. All calibration criteria were met.

Summary:

No analytical problem was encountered.

EPA Method 8270C
Semivolatile Organic Compounds

Sample Preparation:

The sample was extracted according to EPA method 3550B. All holding times were met.

Sample Analysis Information:

The sample was analyzed according to EPA Method 8270C using a Hewlett Packard GC/MS.

Quality Control/Assurance

Spike Recovery

A Laboratory Control Spike (LCS) was used for quality assurance. All spike recoveries were acceptable.

No sample was designated by the client for an MS/MSD analysis.

Method blanks

No target compound was detected at or above the method detection limit.

Surrogates

The sample recovered three surrogates outside their control limits: 2-Fluorophenol at 39.1%, Phenol at 18.7% and Terphenyl-d14 at 162%. All surrogate recoveries were within control limits.

Calibration

The initial and continuing calibrations were performed according to the method. All method acceptance criteria were met.

Tuning:

The instrument was tuned using DFTPP. All method criteria were met.

Internal Standards

The internal standard area counts were compared to the mid-point of the initial calibration according to method 8270. All method criteria were met.

Summary:

No other problem was encountered. The data generated are acceptable.

EPA Methods 6020 and 7471A
Metals

Sample Preparation

The tissue samples were digested according to the EPA methods 3051, 3051A, and 7471A.

Analysis Information:

The samples were analyzed for total metals according to EPA method 6020 using a Perkin Elmer Elan 6100 ICP-MS and according to EPA method 7471A using a Perkin Elmer AAnalyst 300. The samples were analyzed twice undiluted; however the internal standards failed. The samples were then analyzed at a dilution factor of 1:5, and internal standard recoveries were acceptable. All holding times were met.

Quality Control/Assurance

Calibrations:

Calibrations were performed according to the methods for the initial calibration and the initial calibration verification. The initial calibration verification is prepared from a second source standard.

Blanks:

The method blanks and continuing calibration blanks were screened down to the method detection limits. No target metal was detected at concentrations greater than one-half the reporting limits.

Spikes:

Laboratory Control Spikes (LCS/LCSD) were used for quality assurance. All LCS recoveries met acceptance criteria.

No sample was designated by the client for an MS/MSD analysis.

Summary:

No analytical exception is noted. All data are acceptable.

EPA Method 8081A
Pesticides

Sample Preparation:

The sample was extracted according to EPA method 3550B. All holding times were met.

Analysis Information:

Samples:

The sample was analyzed for Pesticides according to EPA method 8081A using a Hewlett Packard GC equipped with an ECD.

Calibrations:

Initial and continuing calibrations were performed according to the method. All acceptance criteria were met.

Blanks:

No target analyte was detected above the reporting limit for the method blanks.

Spikes and Duplicates:

A Laboratory Control Spike (LCS) was used for quality assurance. d-BHC recovered above the 105% upper control limit at 117%. D-BHC was not detected in the sample. All other acceptance criteria were met.

No sample was designated by the client for an MS/MSD analysis.

Surrogates:

All surrogates recovered within acceptance limits.

Summary:

No analytical problem was encountered. The data generated are acceptable.

EPA Method 8290A
Dioxins/Furans by GC-HRMS

Sample Preparation:

The sample was extracted according to EPA method 3540C. The percent lipid content was determined using the procedures listed in EPA 8290. All holding times were met.

Sample Analysis Information:

The sample was analyzed according to EPA method 8290A using a Hewlett Packard Gas Chromatograph with a Waters AutoSpec High Resolution Mass Spectrometer detector.

Quality Control/Assurance

Calibrations:

Initial and continuing calibrations were performed according to the method. All calibration criteria were met.

Blanks:

One analyte was detected in the method blank below the PQL, at J-value levels: Total TCDD (0.12 ng/kg). No target analyte was detected above the reporting limits in the method blank.

Spikes:

A Laboratory Control Spike (LCS) was used for quality assurance. All acceptance criteria were met.

No sample was designated by the client for an MS/MSD analysis.

Surrogates

All surrogates recovered within the 40% to 135% control limits.

Summary:

No other problem was encountered.

EPA Method 8260B

Volatile Organic Compounds

Preparation Information:

The fish tissue sample was purged according to EPA method 5035.

Analysis Information:

The samples were analyzed according to EPA method 8260B using a Hewlett Packard GC/MS.

Quality Control/Assurance

Spike Recoveries

Laboratory Control Spikes (LCS) were used for quality assurance. A second source standard was used for the LCS. All recoveries met acceptance criteria.

No sample was designated by the client for an MS/MSD analysis.

Method blanks

In the methanol blank, 1,2,4-Trimethylbenzene and Xylenes were detected at concentrations greater than the PQL. They were also detected in the sample, and are flagged with a "B". No other target compound was detected at or above reporting limits.

Surrogates

Undiluted, all four surrogates recovered outside their control limits in the sample: 1,2-DCA-d4 at 121%, 4-Bromofluorobenzene at 13.2%, Dibromofluoromethane at 124% and Toluene-d8 at 208%. All other recoveries were within acceptance limits.

Initial and Continuing Calibrations

Initial and continuing calibrations were analyzed according to the method. All acceptance criteria were met.

Internal Standards

Internal standard recoveries were checked against the mid-point of the initial calibrations. Undiluted, the sample had low internal standard recoveries. The sample was re-analyzed diluted with acceptable IS recoveries. Both sets of data are included.

Tuning:

The instrument was tuned using BFB. All method criteria were met.

Summary:

No other exception was noted.

EPA Method 314.0
Perchlorate

Sample Preparation:

The sample was prepared according to the method. All holding times were met.

Analysis Information:

The sample was analyzed according to the method using a Dionex DX500 ion chromatograph.

Quality Control/Assurance

Calibrations:

Calibrations were performed according to the method. The ICV is prepared from a second source standard.

Blanks:

The blank contained no Perchlorate at or above half the reporting limit.

Spikes:

Laboratory control spikes (LCS/LCSD) and matrix spike were used for quality assurance. All acceptance criteria were met.

Summary:

All data were acceptable. No analytical exception is noted.

CERTIFICATION

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC. Release of the hard copy has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

11/7/08

Leonard Fong, Ph.D, Laboratory Director / Date

EPA 8330A Explosives-Soil

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd
Project: Makua Shellfish Study
Sample ID: MSM-01
Sample Collection Date: 10/9/2008

ARF: 57221
APPL ID: AX85520
QCG: $83TTS-081020A-127500

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8330	2,4-DNT	Not detected	0.50	0.083	mg/kg	10/20/2008	10/31/2008
EPA 8330	Nitroglycerine	Not detected	0.50	0.085	mg/kg	10/20/2008	10/31/2008
EPA 8330	RDX	Not detected	0.50	0.080	mg/kg	10/20/2008	10/31/2008
EPA 8330	Surrogate: 1,2-Dinitrobenzene (S)	129	70-130		%	10/20/2008	10/31/2008

Quant Method: E2_1021B.M
Run #: 1030_025.D
Instrument: UV1200
Sequence: 081021
Dilution Factor: 1
Initials: PY

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APPL-F1-SC-NoMC-REG MDLs

EPA 8330A Explosives-Soil

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd
Project: Makua Shellfish Study
Sample ID: NM-01
Sample Collection Date: 10/6/2008

ARF: 57221
APPL ID: AX85522
QCG: $83TTS-081021A-127501

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8330	2,4-DNT	Not detected	0.50	0.083	mg/kg	10/21/2008	10/30/2008
EPA 8330	Nitroglycerine	Not detected	0.50	0.085	mg/kg	10/21/2008	10/30/2008
EPA 8330	RDX	Not detected	0.50	0.080	mg/kg	10/21/2008	10/30/2008
EPA 8330	Surrogate: 1,2-Dinitrobenzene (S)	74.8	70-130		%	10/21/2008	10/30/2008

Quant Method: E2_1021B.M
Run #: 1030_022.D
Instrument: UV1200
Sequence: 081021
Dilution Factor: 1
Initials: PY

Printed: 11/6/2008 4:14:56 PM
APPL-F1-SC-NoMC-REG MDLs

EPA 8330A Explosives-Soil

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd
Project: Makua Shellfish Study
Sample ID: NM-02
Sample Collection Date: 10/7/2008

ARF: 57221
APPL ID: AX85523
QCG: $83TTS-081021A-127501

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8330	2,4-DNT	Not detected	0.50	0.083	mg/kg	10/21/2008	10/31/2008
EPA 8330	Nitroglycerine	Not detected	0.50	0.085	mg/kg	10/21/2008	10/31/2008
EPA 8330	RDX	Not detected	0.50	0.080	mg/kg	10/21/2008	10/31/2008
EPA 8330	Surrogate: 1,2-Dinitrobenzene (S)	82.0	70-130		%	10/21/2008	10/31/2008

Quant Method: E2_1021B.M
Run #: 1030_023.D
Instrument: UV1200
Sequence: 081021
Dilution Factor: 1
Initials: PY

Printed: 11/6/2008 4:14:56 PM
APPL-F1-SC-NoMC-REG MDLs

Method Blank
EPA 8330A Explosives-Soil

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Blank Name/QCG: **081020S-85339 - 127500**
Batch ID: $83TTS-081020A

Sample Type	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
BLANK	2,4-DNT	Not detected	0.50	0.083	mg/kg	10/20/2008	10/30/2008
BLANK	Nitroglycerine	Not detected	0.50	0.085	mg/kg	10/20/2008	10/30/2008
BLANK	RDX	Not detected	0.50	0.080	mg/kg	10/20/2008	10/30/2008
BLANK	Surrogate: 1,2-Dinitrobenzene (S)	103	70-130		%	10/20/2008	10/30/2008

Quant Method: E2_1021B.M
Run #: 1030_004.D
Instrument: UV1200
Sequence: 081021
Initials: PY

GC SC-Blank-REG MDLs
Printed: 11/6/2008 4:15:04 PM

Method Blank

EPA 8330A Explosives-Soil

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Blank Name/QCG: **081021S-85522 - 127501**
Batch ID: $83TTS-081021A

Sample Type	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
BLANK	2,4-DNT	Not detected	0.50	0.083	mg/kg	10/21/2008	10/30/2008
BLANK	Nitroglycerine	Not detected	0.50	0.085	mg/kg	10/21/2008	10/30/2008
BLANK	RDX	Not detected	0.50	0.080	mg/kg	10/21/2008	10/30/2008
BLANK	Surrogate: 1,2-Dinitrobenzene (S)	82.9	70-130		%	10/21/2008	10/30/2008

Quant Method: E2_1021B.M
Run #: 1030_009.D
Instrument: UV1200
Sequence: 081021
Initials: PY

GC SC-Blank-REG MDLs
Printed: 11/6/2008 4:15:04 PM

Laboratory Control Spike Recovery
EPA 8330A Explosives-Soil

APPL ID: **081020S-85339 LCS - 127500**
Batch ID: $83TTS-081020A

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits
2,4-DNT	1.16	1.05	90.5	80-125
Nitroglycerine	1.16	1.05	90.5	75-125
RDX	1.16	0.942	81.2	70-135
Surrogate: 1,2-Dinitrobenzene	1.16	0.854	73.6	70-130

Comments:

Primary	SPK
Quant Method :	E2_1021B.M
Extraction Date :	10/20/2008
Analysis Date :	10/31/2008
Instrument :	UV1200
Run :	1030_035.D
Initials :	PY

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APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8330A Explosives-Soil

APPL ID: **081021S-85522 LCS - 127501**
Batch ID: $83TTS-081021A

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits
2,4-DNT	1.20	1.36	113	80-125
Nitroglycerine	1.20	1.35	113	75-125
RDX	1.20	1.22	102	70-135
Surrogate: 1,3-Dinitrobenzene	1.20	1.31	109	70-130

Comments:

Primary	SPK
Quant Method :	E2_1021B.M
Extraction Date :	10/21/2008
Analysis Date :	10/30/2008
Instrument :	UV1200
Run :	1030_010.D
Initials :	PY

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APPL Standard LCS

EPA 8270C Soils

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd
Project: Makua Shellfish Study
Sample ID: NM-01
Sample Collection Date: 10/06/08

ARF: 57221
APPL ID: AX85522
QCG: $8270S-081017A-127465

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8270C	Bis (2-ethylhexyl) phthalate	Not detected	330	61.6	ug/Kg	10/17/08	10/29/08
EPA 8270C	Di-n-butylphthalate	Not detected	330	65.9	ug/Kg	10/17/08	10/29/08
EPA 8270C	Di-n-octylphthalate	Not detected	330	58.4	ug/Kg	10/17/08	10/29/08
EPA 8270C	Diethyl phthalate	Not detected	330	62.1	ug/Kg	10/17/08	10/29/08
EPA 8270C	Pentachlorophenol	Not detected	330	58.7	ug/Kg	10/17/08	10/29/08
EPA 8270C	Pyrene	Not detected	330	54.1	ug/Kg	10/17/08	10/29/08
EPA 8270C	Surrogate: 2,4,6-Tribromophenol (S)	57.7	44-114		%	10/17/08	10/29/08
EPA 8270C	Surrogate: 2-Fluorbiphenyl (S)	84.4	39-116		%	10/17/08	10/29/08
EPA 8270C	Surrogate: 2-Fluorophenol (S)	39.1 #	48-118		%	10/17/08	10/29/08
EPA 8270C	Surrogate: Nitrobenzene-D5 (S)	80.6	49-142		%	10/17/08	10/29/08
EPA 8270C	Surrogate: Phenol (S)	18.7 #	47-122		%	10/17/08	10/29/08
EPA 8270C	Surrogate: Terphenyl-d14 (S)	162 #	40-135		%	10/17/08	10/29/08

= Recovery (or RPD) is outside QC limits.

Quant Method: Y8270B.M
Run #: 1028Y029
Instrument: YODA
Sequence: Y081028
Dilution Factor: 1
Initials: LF

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APPL-F1-SC-NoMC-REG MDLs

Method Blank
EPA 8270C Soils

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Blank Name/QCG: **081017S-85522 - 127465**
Batch ID: $8270S-081017A

Sample Type	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
BLANK	Bis (2-ethylhexyl) phthalate	Not detected	330	61.6	ug/Kg	10/17/08	10/29/08
BLANK	Di-n-butylphthalate	Not detected	330	65.9	ug/Kg	10/17/08	10/29/08
BLANK	Di-n-octylphthalate	Not detected	330	58.4	ug/Kg	10/17/08	10/29/08
BLANK	Diethyl phthalate	Not detected	330	62.1	ug/Kg	10/17/08	10/29/08
BLANK	Pentachlorophenol	Not detected	330	58.7	ug/Kg	10/17/08	10/29/08
BLANK	Pyrene	Not detected	330	54.1	ug/Kg	10/17/08	10/29/08
BLANK	Surrogate: 2,4,6-Tribromophenol (S)	75.7	44-114		%	10/17/08	10/29/08
BLANK	Surrogate: 2-Fluorbiphenyl (S)	76.4	39-116		%	10/17/08	10/29/08
BLANK	Surrogate: 2-Fluorophenol (S)	67.7	48-118		%	10/17/08	10/29/08
BLANK	Surrogate: Nitrobenzene-D5 (S)	66.3	49-142		%	10/17/08	10/29/08
BLANK	Surrogate: Phenol (S)	72.2	47-122		%	10/17/08	10/29/08
BLANK	Surrogate: Terphenyl-d14 (S)	77.4	40-135		%	10/17/08	10/29/08

Quant Method: Y8270B.M
Run #: 1028Y018
Instrument: YODA
Sequence: Y081028
Initials: LF

GC SC-Blank-REG MDLs
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Laboratory Control Spike Recovery
EPA 8270C Soils

APPL ID: **081017S-85522 LCS - 127465**
Batch ID: $8270S-081017A

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level ug/Kg	SPK Result ug/Kg	SPK % Recovery	Recovery Limits
Bis (2-ethylhexyl) phthalate	1670	1150	68.9	38-148
Di-n-butylphthalate	1670	1180	70.7	36-151
Di-n-octylphthalate	1670	1120	67.1	51-139
Diethyl phthalate	1670	1220	73.1	51-126
Pentachlorophenol	1670	1320	79.0	32-150
Pyrene	1670	1130	67.7	45-137
Surrogate: 2,4,6-Tribromophenol	6670	5140	77.1	44-114
Surrogate: 2-Fluorbiphenyl	3330	2460	73.9	39-116
Surrogate: 2-Fluorophenol	6670	4590	68.8	48-118
Surrogate: Nitrobenzene-D5	3330	2320	69.7	49-142
Surrogate: Phenol	6670	4840	72.6	47-122
Surrogate: Terphenyl-d14	3330	2470	74.2	40-135

Comments:

Primary	SPK
Quant Method :	Y8270B.M
Extraction Date :	10/17/08
Analysis Date :	10/29/08
Instrument :	YODA
Run :	1028Y019
Initials :	LF

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APPL Standard LCS

Metals Analysis

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd
Project: Makua Shellfish Study
Sample ID: MSM-02
Sample Collection Date: 10/09/08

ARF: 57221
APPL ID: AX85521

Method	Analyte	Result	PQL	MDL	Units	DF	Prep Date	Analysis Date
6020	Aluminum (Al)	143	10.0	0.30	mg/Kg	5	10/16/08	10/23/08
6020	Antimony (Sb)	Not detected	0.5	0.15	mg/Kg	5	10/16/08	10/22/08
6020	Arsenic (As)	3.6	2.5	0.40	mg/Kg	5	10/16/08	10/22/08
6020	Barium (Ba)	57.8	0.5	0.20	mg/Kg	5	10/16/08	10/22/08
6020	Beryllium (Be)	Not detected	5.0	0.35	mg/Kg	5	10/16/08	10/23/08
6020	Cadmium (Cd)	Not detected	0.5	0.15	mg/Kg	5	10/16/08	10/22/08
6020	Chromium (Cr)	1.3 J	2.5	0.10	mg/Kg	5	10/16/08	10/23/08
6020	Cobalt (Co)	0.80	0.5	0.10	mg/Kg	5	10/16/08	10/23/08
6020	Copper (Cu)	39.7	0.5	0.20	mg/Kg	5	10/16/08	10/22/08
6020	Iron (Fe)	226	50.0	15.00	mg/Kg	5	10/16/08	10/23/08
6020	Lead (Pb)	0.16 J	0.5	0.10	mg/Kg	5	10/16/08	10/22/08
6020	Manganese (Mn)	122	0.5	0.25	mg/Kg	5	10/16/08	10/23/08
7471A/7471A	Mercury	Not detected	0.1	0.02	mg/Kg	1	10/22/08	10/24/08
6020	Selenium (Se)	1.2	1.0	0.20	mg/Kg	5	10/16/08	10/22/08
6020	Silver (Ag)	Not detected	0.5	0.10	mg/Kg	5	10/16/08	10/22/08
6020	Thallium (Tl)	Not detected	0.5	0.10	mg/Kg	5	10/16/08	10/22/08
6020	Vanadium (V)	0.77	0.5	0.10	mg/Kg	5	10/16/08	10/23/08
6020	Zinc (Zn)	28.4	10.0	0.65	mg/Kg	5	10/16/08	10/22/08

J = Estimated value.

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APPL-F1-SC-NoMC-REG MDLs

Metals Analysis

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd
Project: Makua Shellfish Study
Sample ID: NM-01
Sample Collection Date: 10/06/08

ARF: 57221
APPL ID: AX85522

Method	Analyte	Result	PQL	MDL	Units	DF	Prep Date	Analysis Date
6020	Aluminum (Al)	73.2	10.0	0.30	mg/Kg	5	10/16/08	10/23/08
6020	Antimony (Sb)	Not detected	0.5	0.15	mg/Kg	5	10/16/08	10/22/08
6020	Arsenic (As)	2.2 J	2.5	0.40	mg/Kg	5	10/16/08	10/22/08
6020	Barium (Ba)	4.1	0.5	0.20	mg/Kg	5	10/16/08	10/22/08
6020	Beryllium (Be)	Not detected	5.0	0.35	mg/Kg	5	10/16/08	10/23/08
6020	Cadmium (Cd)	Not detected	0.5	0.15	mg/Kg	5	10/16/08	10/22/08
6020	Chromium (Cr)	1.0 J	2.5	0.10	mg/Kg	5	10/16/08	10/23/08
6020	Cobalt (Co)	0.23 J	0.5	0.10	mg/Kg	5	10/16/08	10/23/08
6020	Copper (Cu)	31.0	0.5	0.20	mg/Kg	5	10/16/08	10/22/08
6020	Iron (Fe)	110	50.0	15.00	mg/Kg	5	10/16/08	10/23/08
6020	Lead (Pb)	Not detected	0.5	0.10	mg/Kg	5	10/16/08	10/22/08
6020	Manganese (Mn)	32.5	0.5	0.25	mg/Kg	5	10/16/08	10/23/08
7471A/7471A	Mercury	Not detected	0.1	0.02	mg/Kg	1	10/22/08	10/24/08
6020	Selenium (Se)	Not detected	1.0	0.20	mg/Kg	5	10/16/08	10/22/08
6020	Silver (Ag)	0.12 J	0.5	0.10	mg/Kg	5	10/16/08	10/22/08
6020	Thallium (Tl)	Not detected	0.5	0.10	mg/Kg	5	10/16/08	10/22/08
6020	Vanadium (V)	0.36 J	0.5	0.10	mg/Kg	5	10/16/08	10/23/08
6020	Zinc (Zn)	14.8	10.0	0.65	mg/Kg	5	10/16/08	10/22/08

J = Estimated value.

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APPL-F1-SC-NoMC-REG MDLs

METALS BLANK

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Method	Analyte	Result	PQL	MDL	Units	Prep Date	Analysis Date	QC Group
6020	Antimony (Sb)	Not detected	0.1	0.03	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Arsenic (As)	Not detected	0.5	0.08	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Barium (Ba)	Not detected	0.1	0.04	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Cadmium (Cd)	Not detected	0.1	0.03	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Copper (Cu)	Not detected	0.1	0.04	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Lead (Pb)	Not detected	0.1	0.02	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Selenium (Se)	Not detected	0.2	0.04	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Silver (Ag)	Not detected	0.1	0.02	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Thallium (Tl)	Not detected	0.1	0.02	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Zinc (Zn)	0.45 J	2.0	0.13	mg/Kg	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Aluminum (Al)	0.39 J	2.0	0.06	mg/Kg	10/16/08	10/23/08	$6020S-081016A1-AX84606
6020	Beryllium (Be)	Not detected	1.0	0.07	mg/Kg	10/16/08	10/23/08	$6020S-081016A1-AX84606
6020	Chromium (Cr)	Not detected	0.5	0.02	mg/Kg	10/16/08	10/23/08	$6020S-081016A1-AX84606
6020	Cobalt (Co)	Not detected	0.1	0.02	mg/Kg	10/16/08	10/23/08	$6020S-081016A1-AX84606
6020	Iron (Fe)	Not detected	10.0	2.91	mg/Kg	10/16/08	10/23/08	$6020S-081016A1-AX84606
6020	Manganese (Mn)	Not detected	0.1	0.05	mg/Kg	10/16/08	10/23/08	$6020S-081016A1-AX84606
6020	Vanadium (V)	Not detected	0.1	0.02	mg/Kg	10/16/08	10/23/08	$6020S-081016A1-AX84606
7471A	Mercury	Not detected	0.1	0.02	mg/Kg	10/22/08	10/24/08	$HG-S-081022A-AX85521

Metals SC-Blank-REG MDLs
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Laboratory Control Spike Recoveries

METALS

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Method	Compound Name	Spike Lvl mg/Kg	SPK Res mg/Kg	DUP Res mg/Kg	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
6020	Aluminum (Al)	400	394	423	98.5	106	7.1	20	80-120	10/16/08	10/23/08	10/16/08	10/23/08	$6020S-081016A1-AX8460
6020	Antimony (Sb)	50.0	54.7	56.9	109	114	3.9	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Arsenic (As)	50.0	51.2	53.6	102	107	4.6	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Barium (Ba)	50.0	54.1	54.4	108	109	0.6	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Beryllium (Be)	10.00	10.4	10.5	104	105	1.0	20	80-120	10/16/08	10/23/08	10/16/08	10/23/08	$6020S-081016A1-AX8460
6020	Cadmium (Cd)	10.00	10.5	10.7	105	107	1.9	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Chromium (Cr)	50.0	51.5	51.8	103	104	0.6	20	80-120	10/16/08	10/23/08	10/16/08	10/23/08	$6020S-081016A1-AX8460
6020	Cobalt (Co)	50.0	48.1	48.8	96.2	97.6	1.4	20	80-120	10/16/08	10/23/08	10/16/08	10/23/08	$6020S-081016A1-AX8460
6020	Copper (Cu)	50.0	52.6	55.3	105	111	5.0	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Iron (Fe)	200	193	194	96.5	97.0	0.5	20	80-120	10/16/08	10/23/08	10/16/08	10/23/08	$6020S-081016A1-AX8460
6020	Lead (Pb)	50.0	53.2	54.1	106	108	1.7	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Manganese (Mn)	50.0	48.4	50.1	96.8	100	3.5	20	80-120	10/16/08	10/23/08	10/16/08	10/23/08	$6020S-081016A1-AX8460
6020	Selenium (Se)	50.0	53.2	55.7	106	111	4.6	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Silver (Ag)	20.0	19.5	19.9	97.5	99.5	2.0	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Thallium (Tl)	50.0	56.7	56.7	113	113	0.0	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
6020	Vanadium (V)	50.0	51.7	53.3	103	107	3.0	20	80-120	10/16/08	10/23/08	10/16/08	10/23/08	$6020S-081016A1-AX8460
6020	Zinc (Zn)	100.0	105	109	105	109	3.7	20	80-120	10/16/08	10/22/08	10/16/08	10/22/08	$6020S-081016A-AX84606
EPA 7471A	Mercury	0.667	0.65	0.66	97.5	99.0	1.5	20	80-120	10/22/08	10/24/08	10/22/08	10/24/08	$HG-S-081022A-AX85521

Comments: _____

Printed: 10/25/08 7:08:30 AM
APPL Standard LCSD

EPA 8081A SOIL

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd
Project: Makua Shellfish Study
Sample ID: NM-01
Sample Collection Date: 10/06/08

ARF: 57221
APPL ID: AX85522
QCG: $88SS-081017A-127228

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8081A	4,4'-DDT	Not detected	5.0	0.40	ug/Kg	10/17/08	10/27/08
EPA 8081A	a-BHC	Not detected	5.0	1.00	ug/Kg	10/17/08	10/27/08
EPA 8081A	Aldrin	Not detected	5.0	1.40	ug/Kg	10/17/08	10/27/08
EPA 8081A	b-BHC	Not detected	5.0	1.00	ug/Kg	10/17/08	10/27/08
EPA 8081A	d-BHC	Not detected	5.0	1.10	ug/Kg	10/17/08	10/27/08
EPA 8081A	g-BHC (Lindane)	Not detected	5.0	0.90	ug/Kg	10/17/08	10/27/08
EPA 8081A	Heptachlor	Not detected	5.0	1.10	ug/Kg	10/17/08	10/27/08
EPA 8081A	Heptachlor epoxide	Not detected	5.0	1.10	ug/Kg	10/17/08	10/27/08
EPA 8081A	Surrogate: Decachlorobiphenyl (S)	94.4	29-125		%	10/17/08	10/27/08
EPA 8081A	Surrogate: TCmX (S)	115	40-123		%	10/17/08	10/27/08

Quant Method: OCLB.M
Run #: 1021128
Instrument: Ethel
Sequence: 081021
Dilution Factor: 1
Initials: MA

Printed: 11/07/08 4:41:04 PM
APPL-F1-SC-NoMC-REG MDLs

Method Blank
EPA 8081A SOIL

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Blank Name/QCG: **081017S-85522 - 127228**
Batch ID: $88SS-081017A

Sample Type	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
BLANK	4,4'-DDT	Not detected	5.0	0.40	ug/Kg	10/17/08	10/24/08
BLANK	a-BHC	Not detected	5.0	1.00	ug/Kg	10/17/08	10/24/08
BLANK	Aldrin	Not detected	5.0	1.40	ug/Kg	10/17/08	10/24/08
BLANK	b-BHC	Not detected	5.0	1.00	ug/Kg	10/17/08	10/24/08
BLANK	d-BHC	Not detected	5.0	1.10	ug/Kg	10/17/08	10/24/08
BLANK	g-BHC (Lindane)	Not detected	5.0	0.90	ug/Kg	10/17/08	10/24/08
BLANK	Heptachlor	Not detected	5.0	1.10	ug/Kg	10/17/08	10/24/08
BLANK	Heptachlor epoxide	Not detected	5.0	1.10	ug/Kg	10/17/08	10/24/08
BLANK	Surrogate: Decachlorobiphenyl (S)	98.3	29-125		%	10/17/08	10/24/08
BLANK	Surrogate: TCmX (S)	96.3	40-123		%	10/17/08	10/24/08

Quant Method: OCLB.M
Run #: 1021094
Instrument: Ethel
Sequence: 081021
Initials: MA

GC SC-Blank-REG MDLs
Printed: 10/30/08 10:39:52 AM

Laboratory Control Spike Recovery
EPA 8081A SOIL

APPL ID: **081017S-85522 LCS - 127228**
Batch ID: $88SS-081017A

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level ug/Kg	SPK Result ug/Kg	SPK % Recovery	Recovery Limits
4,4'-DDT	333	358	108	47-120
a-BHC	333	378	114	41-114
Aldrin	333	354	106	40-108
b-BHC	333	365	110	63-129
d-BHC	333	388	117 #	52-105
g-BHC (Lindane)	333	373	112	46-114
Heptachlor	333	356	107	48-115
Heptachlor epoxide	333	342	103	61-110
Surrogate: Decachlorobiphenyl	333	323	97.0	29-125
Surrogate: TCmX	333	309	92.8	40-123

= Recovery is outside QC limits.

Comments:

Primary	SPK
Quant Method :	OCLB.M
Extraction Date :	10/17/08
Analysis Date :	10/24/08
Instrument :	Ethel
Run :	1021095
Initials :	MA

Printed: 10/30/08 10:39:55 AM

APPL Standard LCS

EPA 8290 - Dioxins and Furans

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd
Project: Makua Shellfish Study
Sample ID: NM-01
Sample Collection Date: 10/06/08

ARF: 57221
APPL ID: AX85522
QCG: $829ET27S-081027-12747

Method	Analyte	Result	EDL / EMPC	Units	Extraction Date	Analysis Date
EPA 8290	1,2,3,4,6,7,8-heptachloro-dibenzofuran	Not detected	7.8	ng/kg	10/27/08	11/03/08
EPA 8290	1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxi	Not detected	0.82	ng/kg	10/27/08	11/03/08
EPA 8290	1,2,3,4,7,8,9-heptachloro-dibenzofuran	Not detected	3.8	ng/kg	10/27/08	11/03/08
EPA 8290	1,2,3,4,7,8-hexachloro-dibenzofuran	Not detected	3.6	ng/kg	10/27/08	11/03/08
EPA 8290	1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	Not detected	0.14	ng/kg	10/27/08	11/03/08
EPA 8290	1,2,3,6,7,8-hexachloro-dibenzofuran	Not detected	1.5	ng/kg	10/27/08	11/03/08
EPA 8290	1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	Not detected	0.074	ng/kg	10/27/08	11/03/08
EPA 8290	1,2,3,7,8,9-hexachloro-dibenzofuran	Not detected	0.29	ng/kg	10/27/08	11/03/08
EPA 8290	1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	Not detected	0.17	ng/kg	10/27/08	11/03/08
EPA 8290	1,2,3,7,8-pentachloro-dibenzofuran	Not detected	0.18	ng/kg	10/27/08	11/03/08
EPA 8290	1,2,3,7,8-pentachlorodibenzo-p-dioxin	Not detected	0.69	ng/kg	10/27/08	11/03/08
EPA 8290	2,3,4,6,7,8-hexachloro-dibenzofuran	Not detected	35	ng/kg	10/27/08	11/03/08
EPA 8290	2,3,4,7,8-pentachloro-dibenzofuran	Not detected	0.42	ng/kg	10/27/08	11/03/08
EPA 8290	2,3,7,8-tetrachloro-dibenzofuran	Not detected	0.51	ng/kg	10/27/08	11/03/08
EPA 8290	2,3,7,8-tetrachlorodibenzo-p-dioxin	Not detected	0.061	ng/kg	10/27/08	11/03/08
EPA 8290	octachloro-dibenzofuran	Not detected	0.34	ng/kg	10/27/08	11/03/08
EPA 8290	octachlorodibenzo-p-dioxin	Not detected	5.2	ng/kg	10/27/08	11/03/08
EPA 8290	TCDD, total	0.08 J	NA	ng/kg	10/27/08	11/03/08
EPA 8290	TCDF, total	0.23 J	NA	ng/kg	10/27/08	11/03/08
EPA 8290	Surrogate: 13C-1,2,3,4,6,7,8-HpCDD (S)	85.2	40-135	%	10/27/08	11/03/08
EPA 8290	Surrogate: 13C-1,2,3,4,6,7,8-HpCDF (S)	85.0	40-135	%	10/27/08	11/03/08
EPA 8290	Surrogate: 13C-1,2,3,4,7,8-HxCDF (S)	104	40-135	%	10/27/08	11/03/08
EPA 8290	Surrogate: 13C-1,2,3,6,7,8-HxCDD (S)	77.7	40-135	%	10/27/08	11/03/08
EPA 8290	Surrogate: 13C-1,2,3,7,8-PeCDD (S)	45.5	40-135	%	10/27/08	11/03/08
EPA 8290	Surrogate: 13C-1,2,3,7,8-PeCDF (S)	54.3	40-135	%	10/27/08	11/03/08
EPA 8290	Surrogate: 13C-2,3,7,8-TCDD (S)	67.2	40-135	%	10/27/08	11/03/08
EPA 8290	Surrogate: 13C-2,3,7,8-TCDF (S)	82.4	40-135	%	10/27/08	11/03/08
EPA 8290	Surrogate: 13C-OCDD (S)	61.7	40-135	%	10/27/08	11/03/08

J = Estimated value.

Quant Method: 8290_081014
Run #: 081102_HR_22
Instrument: Magneto
Sequence: 081102
Dilution Factor: 1
Initials: RP

Printed: 11/07/08 3:34:45 PM
Form 1 - APPL Standard GC - No MC

Lipid

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd
Project: Makua Shellfish Study
Sample ID: NM-01
Sample Collection Date: 10/6/2008

ARF: 57221
APPL ID: AX85522
QCG: $LIPID-081027A-127482

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
%Lipid	Lipids	1.5	NA	%	10/27/2008	10/28/2008

Quant Method: NA
Run #: NA
Instrument: NA
Sequence: NA
Dilution Factor: 1
Initials: RP

Printed: 11/6/2008 9:53:44 AM
Form 1 - APPL Standard GC - No MC

Method Blank

EPA 8290 - Dioxins and Furans

Blank Name/QCG: **081027S-85522 - 127473**
Batch ID: $829ET27S-081027

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Sample Type	Analyte	Result	EDL / EMPC	Units	Extraction Date	Analysis Date
BLANK	1,2,3,4,6,7,8-heptachloro-dibenzofuran	Not detected	0.14	ng/kg	10/27/08	11/03/08
BLANK	1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxi	Not detected	0.25	ng/kg	10/27/08	11/03/08
BLANK	1,2,3,4,7,8,9-heptachloro-dibenzofuran	Not detected	0.1	ng/kg	10/27/08	11/03/08
BLANK	1,2,3,4,7,8-hexachloro-dibenzofuran	Not detected	0.021	ng/kg	10/27/08	11/03/08
BLANK	1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	Not detected	0.044	ng/kg	10/27/08	11/03/08
BLANK	1,2,3,6,7,8-hexachloro-dibenzofuran	Not detected	0.025	ng/kg	10/27/08	11/03/08
BLANK	1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	Not detected	0.1	ng/kg	10/27/08	11/03/08
BLANK	1,2,3,7,8,9-hexachloro-dibenzofuran	Not detected	0.024	ng/kg	10/27/08	11/03/08
BLANK	1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	Not detected	0.064	ng/kg	10/27/08	11/03/08
BLANK	1,2,3,7,8-pentachloro-dibenzofuran	Not detected	0.076	ng/kg	10/27/08	11/03/08
BLANK	1,2,3,7,8-pentachlorodibenzo-p-dioxin	Not detected	0.053	ng/kg	10/27/08	11/03/08
BLANK	2,3,4,6,7,8-hexachloro-dibenzofuran	Not detected	0.019	ng/kg	10/27/08	11/03/08
BLANK	2,3,4,7,8-pentachloro-dibenzofuran	Not detected	0.063	ng/kg	10/27/08	11/03/08
BLANK	2,3,7,8-tetrachloro-dibenzofuran	Not detected	0.22	ng/kg	10/27/08	11/03/08
BLANK	2,3,7,8-tetrachlorodibenzo-p-dioxin	Not detected	0.069	ng/kg	10/27/08	11/03/08
BLANK	octachloro-dibenzofuran	Not detected	0.13	ng/kg	10/27/08	11/03/08
BLANK	octachlorodibenzo-p-dioxin	Not detected	1.2	ng/kg	10/27/08	11/03/08
BLANK	TCDD, total	0.12 J	NA	ng/kg	10/27/08	11/03/08
BLANK	TCDF, total	Not detected	2.1	ng/kg	10/27/08	11/03/08
BLANK	Surrogate: 13C-1,2,3,4,6,7,8-HpCDD (S)	72.1	40-135	%	10/27/08	11/03/08
BLANK	Surrogate: 13C-1,2,3,4,6,7,8-HpCDF (S)	86.4	40-135	%	10/27/08	11/03/08
BLANK	Surrogate: 13C-1,2,3,4,7,8-HxCDF (S)	100	40-135	%	10/27/08	11/03/08
BLANK	Surrogate: 13C-1,2,3,6,7,8-HxCDD (S)	80.2	40-135	%	10/27/08	11/03/08
BLANK	Surrogate: 13C-1,2,3,7,8-PeCDD (S)	57.5	40-135	%	10/27/08	11/03/08
BLANK	Surrogate: 13C-1,2,3,7,8-PeCDF (S)	63.8	40-135	%	10/27/08	11/03/08
BLANK	Surrogate: 13C-2,3,7,8-TCDD (S)	68.1	40-135	%	10/27/08	11/03/08
BLANK	Surrogate: 13C-2,3,7,8-TCDF (S)	84.7	40-135	%	10/27/08	11/03/08
BLANK	Surrogate: 13C-OCDD (S)	47.2	40-135	%	10/27/08	11/03/08

J = Estimated value.

Quant Method: 8290_081014
Run #: 081102_HR_19
Instrument: Magneto
Sequence: 081102
Initials: RP

Printed: 11/07/08 3:36:24 PM

Laboratory Control Spike Recoveries
EPA 8290 - Dioxins and Furans

APPL ID: **081027S-85522 LCS - 127473**
Batch ID: $829ET27S-081027

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Lvl ng/kg	SPK Result ng/kg	DUP Result ng/kg	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1,2,3,4,6,7,8-heptachloro-dibenzofuran	125	137	132	110	106	70-130	3.7	30
1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxi	125	134	118	107	94.4	70-130	12.7	30
1,2,3,4,7,8,9-heptachloro-dibenzofuran	125	124	114	99.2	91.2	70-130	8.4	30
1,2,3,4,7,8-hexachloro-dibenzofuran	125	130	130	104	104	70-130	0.0	30
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	125	137	131	110	105	70-130	4.5	30
1,2,3,6,7,8-hexachloro-dibenzofuran	125	130	132	104	106	70-130	1.5	30
1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	125	147	136	118	109	70-130	7.8	30
1,2,3,7,8,9-hexachloro-dibenzofuran	125	107	103	85.6	82.4	70-130	3.8	30
1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	125	146	136	117	109	70-130	7.1	30
1,2,3,7,8-pentachloro-dibenzofuran	125	146	139	117	111	70-130	4.9	30
1,2,3,7,8-pentachlorodibenzo-p-dioxin	125	149	139	119	111	70-130	6.9	30
2,3,4,6,7,8-hexachloro-dibenzofuran	125	133	126	106	101	70-130	5.4	30
2,3,4,7,8-pentachloro-dibenzofuran	125	133	137	106	110	70-130	3.0	30
2,3,7,8-tetrachloro-dibenzofuran	50.0	58.4	56.2	117	112	70-130	3.8	30
2,3,7,8-tetrachlorodibenzo-p-dioxin	50.0	58.4	58.0	117	116	70-130	0.69	30
octachloro-dibenzofuran	250	278	264	111	106	70-130	5.2	30
octachlorodibenzo-p-dioxin	250	275	265	110	106	70-130	3.7	30
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	625	412	437	65.9	69.9	40-135		
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	625	445	489	71.2	78.2	40-135		
Surrogate: 13C-1,2,3,4,7,8-HxCDF	625	514	585	82.2	93.6	40-135		
Surrogate: 13C-1,2,3,6,7,8-HxCDD	625	421	478	67.4	76.5	40-135		
Surrogate: 13C-1,2,3,7,8-PeCDD	250	105	145	42.0	58.0	40-135		
Surrogate: 13C-1,2,3,7,8-PeCDF	250	125	165	50.0	66.0	40-135		
Surrogate: 13C-2,3,7,8-TCDD	250	158	167	63.2	66.8	40-135		

Comments:

Primary	SPK	DUP
Quant Method :	8290_081014	8290_081014
Extraction Date :	10/27/2008	10/27/2008
Analysis Date :	11/3/2008	11/3/2008
Instrument :	Magneto	Magneto
Run :	081102_HR_16	081102_HR_17
Initials :	RP	

Printed: 11/6/2008 9:20:12 AM
APPL Standard LCSD

Laboratory Control Spike Recoveries

EPA 8290 - Dioxins and Furans

APPL ID: **081027S-85522 LCS - 127473**
Batch ID: $829ET27S-081027

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Lvl ng/kg	SPK Result ng/kg	DUP Result ng/kg	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
Surrogate: 13C-2,3,7,8-TCDF	250	183	204	73.2	81.6	40-135		
Surrogate: 13C-OCDD	1250	651	613	52.1	49.0	40-135		

Comments:

Primary	SPK	DUP
Quant Method :	8290_081014	8290_081014
Extraction Date :	10/27/2008	10/27/2008
Analysis Date :	11/3/2008	11/3/2008
Instrument :	Magneto	Magneto
Run :	081102_HR_16	081102_HR_17
Initials :	RP	

Printed: 11/6/2008 9:20:12 AM
APPL Standard LCSD

EPA 8260B Soil

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd
Project: Makua Shellfish Study
Sample ID: NM-01
Sample Collection Date: 10/06/08

ARF: 57221
APPL ID: AX85522
QCG: $8260S-081016AM-127286

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	5.0	1.18	ug/Kg	10/16/08	10/16/08
EPA 8260B	Ethylbenzene	Not detected	5.0	0.64	ug/Kg	10/16/08	10/16/08
EPA 8260B	Styrene	Not detected	5.0	0.69	ug/Kg	10/16/08	10/16/08
EPA 8260B	Toluene	Not detected	5.0	0.65	ug/Kg	10/16/08	10/16/08
EPA 8260B	Xylenes	Not detected	5.0	0.68	ug/Kg	10/16/08	10/16/08
EPA 8260B	Surrogate: 1,2-Dichloroethane-d4 (S)	121 #	59-120		%	10/16/08	10/16/08
EPA 8260B	Surrogate: 4-Bromofluorobenzene (S)	13.2 #	82-121		%	10/16/08	10/16/08
EPA 8260B	Surrogate: Dibromofluoromethane (S)	124 #	74-122		%	10/16/08	10/16/08
EPA 8260B	Surrogate: Toluene-D8 (S)	208 #	71-127		%	10/16/08	10/16/08

= Recovery (or RPD) is outside QC limits.

Quant Method: M86DODSM.M
Run #: 1016M09
Instrument: Max
Sequence: M081009
Dilution Factor: 1
Initials: SV

Printed: 11/07/08 4:41:04 PM
APPL-F1-SC-NoMC-REG MDLs

EPA 8260B MEOH

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd
Project: Makua Shellfish Study
Sample ID: NM-01
Sample Collection Date: 10/06/08

ARF: 57221
APPL ID: AX85522
QCG: $8260S-081016AH-127298

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B-	1,2,4-Trimethylbenzene	10 B J	25.0	9.50	ug/Kg	10/16/08	10/16/08
EPA 8260B-	Ethyl benzene	Not detected	25.0	11.50	ug/Kg	10/16/08	10/16/08
EPA 8260B-	Styrene	Not detected	25.0	12.50	ug/Kg	10/16/08	10/16/08
EPA 8260B-	Toluene	Not detected	25.0	8.50	ug/Kg	10/16/08	10/16/08
EPA 8260B-	Xylenes	13 B J	25.0	9.50	ug/Kg	10/16/08	10/16/08
EPA 8260B-	Surrogate: 1,2-Dichloroethane-d4 (S)	103	70-125		%	10/16/08	10/16/08
EPA 8260B-	Surrogate: 4-Bromofluorobenzene (S)	93.4	72-133		%	10/16/08	10/16/08
EPA 8260B-	Surrogate: Dibromofluoromethane (S)	107	78-125		%	10/16/08	10/16/08
EPA 8260B-	Surrogate: Toluene-D8 (S)	103	73-124		%	10/16/08	10/16/08

J = Estimated value.
B = The analyte was found in a method blank, as well as in the sample.

Quant Method: H86DODW.M
Run #: 1016H13
Instrument: Hewey
Sequence: H081016
Dilution Factor: 50
Initials: SV

Printed: 11/07/08 4:41:04 PM
APPL-F1-SC-NoMC-REG MDLs

Method Blank
EPA 8260B Soil

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Blank Name/QCG: **081016S-85522 - 127286**
Batch ID: $8260S-081016AM

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	1,2,4-Trimethylbenzene	Not detected	5.0	ug/Kg	10/16/08	10/16/08
BLANK	Ethylbenzene	Not detected	5.0	ug/Kg	10/16/08	10/16/08
BLANK	Styrene	Not detected	5.0	ug/Kg	10/16/08	10/16/08
BLANK	Toluene	Not detected	5.0	ug/Kg	10/16/08	10/16/08
BLANK	Xylenes	Not detected	5.0	ug/Kg	10/16/08	10/16/08
BLANK	Surrogate: 1,2-Dichloroethane-d4 (S)	85.3	59-120	%	10/16/08	10/16/08
BLANK	Surrogate: 4-Bromofluorobenzene (S)	102	82-121	%	10/16/08	10/16/08
BLANK	Surrogate: Dibromofluoromethane (S)	90.6	74-122	%	10/16/08	10/16/08
BLANK	Surrogate: Toluene-D8 (S)	108	71-127	%	10/16/08	10/16/08

Quant Method: M86DODSM.M
Run #: 1016M05
Instrument: Max
Sequence: M081009
Initials: SV

Printed: 10/31/08 11:18:10 AM

Method Blank
EPA 8260B MEOH

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Blank Name/QCG: **081016S-85522 - 127298**
Batch ID: $8260S-081016AH

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	1,2,4-Trimethylbenzene	34	25.0	ug/Kg	10/16/08	10/16/08
BLANK	Ethyl benzene	Not detected	25.0	ug/Kg	10/16/08	10/16/08
BLANK	Styrene	Not detected	25.0	ug/Kg	10/16/08	10/16/08
BLANK	Toluene	Not detected	25.0	ug/Kg	10/16/08	10/16/08
BLANK	Xylenes	70	25.0	ug/Kg	10/16/08	10/16/08
BLANK	Surrogate: 1,2-Dichloroethane-d4 (S)	102	70-125	%	10/16/08	10/16/08
BLANK	Surrogate: 4-Bromofluorobenzene (S)	99.6	72-133	%	10/16/08	10/16/08
BLANK	Surrogate: Dibromofluoromethane (S)	97.7	78-125	%	10/16/08	10/16/08
BLANK	Surrogate: Toluene-D8 (S)	101	73-124	%	10/16/08	10/16/08

Quant Method: H86DODW.M
Run #: 1016H10
Instrument: Hewey
Sequence: H081016
Initials: SV

Printed: 10/31/08 11:42:56 AM

Laboratory Control Spike Recovery
EPA 8260B Soil

APPL ID: **081016S-85522 LCS - 127286**
Batch ID: $8260S-081016AM

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level ug/Kg	SPK Result ug/Kg	SPK % Recovery	Recovery Limits
1,2,4-Trimethylbenzene	50.0	65.0	130	65-135
Ethylbenzene	50.0	59.7	119	78-127
Styrene	50.0	59.4	119	65-135
Toluene	50.0	56.7	113	60-135
Xylenes	150	175	117	70-135
Surrogate: 1,2-Dichloroethane-d4	41.4	35.0	84.6	59-120
Surrogate: 4-Bromofluorobenzene	42.4	43.4	102	82-121
Surrogate: Dibromofluoromethane	42.0	37.4	89.0	74-122
Surrogate: Toluene-D8	43.7	46.2	106	71-127

Comments:

Primary	SPK
Quant Method :	M86DODSM.M
Extraction Date :	10/16/08
Analysis Date :	10/16/08
Instrument :	Max
Run :	1016M02
Initials :	SV

Printed: 10/31/08 11:18:24 AM

APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8260B MEOH

APPL ID: **081016S-85522 LCS - 127298**
Batch ID: $8260S-081016AH

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level ug/Kg	SPK Result ug/Kg	SPK % Recovery	Recovery Limits
1,2,4-Trimethylbenzene	500	605	121	65-135
Ethyl benzene	500	580	116	70-123
Styrene	500	535	107	65-135
Toluene	500	534	107	69-122
Xylenes	1500	1700	113	73-145
Surrogate: 1,2-Dichloroethane-d4	21.2	23.2	110	70-125
Surrogate: 4-Bromofluorobenzene	20.7	21.7	105	72-133
Surrogate: Dibromofluoromethane	22.0	23.6	107	78-125
Surrogate: Toluene-D8	22.6	24.0	106	73-124

Comments:

Primary	SPK
Quant Method :	H86DODW.M
Extraction Date :	10/16/08
Analysis Date :	10/16/08
Instrument :	Hewey
Run :	1016H09
Initials :	SV

Printed: 10/31/08 11:43:09 AM

APPL Standard LCS

Wet Lab Analysis

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Gary Floyd

Project: Makua Shellfish Study

Sample ID: NM-01
Sample Collection Date: 10/06/08

APPL ID: AX85522
ARF: 57221

Method	Analyte	Result	PQL	MDL	Units	Prep Date	Analysis Date
EPA 314.0	Perchlorate in Solids	Not detected	600.0	41.20	ug/Kg	10/22/08	10/22/08

Printed: 11/07/08 4:40:53 PM

APPL-F1-SC-NoMC-REG MDLs

Wetlab Results

ARF: 57221

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Tetra Tech, Inc.
737 Bishop St, ste 3020
Honolulu, HI 96813

Attn: Gary Floyd

Method	Analyte	Result	PQL	MDL	Units	Prep Date	Analysis Date
APPL ID: AX85520	-Client Sample ID: MSM-01		-Sample Collection Date: 10/09/08			Project: Makua Shellfish Study	
CLP MOIST	Moisture	55.9	2.0		%	10/20/08	10/20/08
APPL ID: AX85521	-Client Sample ID: MSM-02		-Sample Collection Date: 10/09/08			Project: Makua Shellfish Study	
CLP MOIST	Moisture	56.6	2.0		%	10/20/08	10/20/08
APPL ID: AX85522	-Client Sample ID: NM-01		-Sample Collection Date: 10/06/08			Project: Makua Shellfish Study	
CLP MOIST	Moisture	74.1	2.0		%	10/20/08	10/20/08

Printed: 10/28/08 11:58:42 AM

WETLAB BLANK

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Method	Analyte	Result	PQL	MDL	Units	Prep Date	Analysis Date	QC Group
EPA 314.0	Perchlorate in Solids	Not detected	30.0	2.06	ug/Kg	10/22/08	10/22/08	$314S-081021A-AX85522

Metals SC-Blank-REG MDLs
Printed: 10/28/08 11:59:56 AM

Laboratory Control Spike Recoveries

WETLAB

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Method	Compound Name	Spike Lvl ug/Kg	SPK Res ug/Kg	DUP Res ug/Kg	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 314.0	Perchlorate in Solids	100.0	93.0	91.2	93.0	91.2	2.0	15	85-115	10/22/08	10/22/08	10/22/08	10/22/08	$314S-081021A-AX85522

Comments:

Printed: 10/28/08 11:59:47 AM
APPL Standard LCSD

CHAIN-OF-CUSTODY RECORD

TETRA TECH

Client Name/Account #: TetraTech, Inc.
Address: 737 Bishop St., Suite 3020
City/State/Zip: Honolulu, HI 96813
Project Manager: Gary Floyd
Telephone Number: (808)533-3366 **Fax No.:** (808)533-3306
Sampler Name: (Print) Maren Anderson
Sampler Signature: [signature]

Report To: Gary Floyd, Susan Carstenn, Yvonne Parry
Invoice To: Yvonne Parry
Project ID: Makua Shellfish Study
Project #: 100-SFO-T95M78

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Multi-incremental Sample	Preservative: Ice	Preservative: HNO_3 (Red Label)	Preservative: HCl (Blue Label)	Preservative: NaOH (Orange Label)	Preservative: H_2SO_4 Plastic (Yellow Label)	Preservative: H_2SO_4 Glass (Yellow Label)	Preservative: None (Black Label)	Preservative: Other (Specify)	Matrix: Groundwater	Matrix: Wastewater	Matrix: Drinking Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify):	Analyze For: See attached Table	Analyze For: limited sample volume	Analyze For: homogenize sample with shells	Analyze For: moisture	Analyze For: Metals (see table)	Analyze For: Energetics (see table)	RUSH TAT (Pre-Schedule)	Standard TAT
MSM-01	10/9/08	1134	1		X		X						X							X	X	X		X		X		X
MSM-02	10/9/08	1145	1		X		X						X							X		X	X	X	X			X
NM-01	10/6/08	1225	1		X		X						X							X	X		X					X
NM-02	10/7/08	1625	1		X		X						X							X		X		X		X		X

Special Instructions: Please homogenize all samples. Prawns can be homogenized with shells. Remove shells from crabs.

Method of Shipment: FEDEX

Relinquished by:	Date	Time	Received by:	Date	Time
Maren Anderson	10.10.08	1238	Susan Carstenn	10.10.08	12:38
Relinquished by: Susan Carstenn	10.13.08	13:15	Received by Laboratory: Yvonne Parry	10.13.08	13:15
Yvonne Parry	10.13.08	13:30	[signature]	10-14-08	1000

Laboratory Comments:
Temperature Upon Receipt:
VOCs Free of Headspace? Y N

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

November 7, 2008

TestAmerica Project Number: G8J170331

Gary Floyd
Tetra Tech, Inc
737 Bishop Street
Suite 3020
Honolulu, HI 96813

Dear Mr. Floyd,

This report contains the analytical results for the sample received under chain of custody by TestAmerica on October 3, 2008. This sample is associated with your 100-SFO-T95M78 project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4402.

Sincerely,

Jill Kellmann
Project Manager

880 Riverside Parkway West Sacramento, CA 95605 **tel** 916.373.5600 **fax** 916.372.1059 **www.testamericainc.com**

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TestAmerica West Sacramento Project Number G8J170331

Case Narrative

Quality Assurance Program

Sample Description Information

Chain of Custody Documentation

BIOLOGIC, 8260B, VOA
Sample: 1
- Sample Data Sheet
- Method Blank Report
- Laboratory QC Reports

BIOLOGIC, 8081A, Pesticides
Sample: 1
- Sample Data Sheet
- Method Blank Report
- Laboratory QC Reports

BIOLOGIC, 8270C, SVOCs
Sample: 1
- Sample Data Sheet
- Method Blank Report
- Laboratory QC Reports

BIOLOGIC, 8330, Explosives
Sample: 1
- Sample Data Sheet
- Method Blank Report
- Laboratory QC Reports

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TestAmerica West Sacramento Project Number G8J170331

BIOLOGIC, 8321A, Perchlorate
Sample: 1
- Sample Data Sheet
- Method Blank Report
- Laboratory QC Reports

BIOLOGIC, 8290, Dioxins/Furans
Sample: 1
- Sample Data Sheet
- Method Blank Report
- Laboratory QC Reports

BIOLOGIC, Metals - Various Methods
Samples: 1
- Sample Data Sheet
- Method Blank Report
- Laboratory QC Reports

BIOLOGIC, 8290, Percent Lipids
Sample: 1
- Sample Data Sheet
- Laboratory QC Reports

BIOLOGICAL, D 2216-90, Percent Moisture
Sample: 1
- Sample Data Sheet
- Laboratory QC Reports

Case Narrative

TestAmerica West Sacramento Project Number G8J170331

General comments
There was insufficient sample volume to prepare a matrix spike/matrix spike duplicate (MS/MSD) pair with all batches except metals.

BIOLOGIC, 6020 Metals
Sample(s): 1
All samples required dilution due to matrix interference. Reporting limits were raised accordingly.

There were no other anomalies associated with this project.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ACCREDITED IN ACCORDANCE WITH nelac

TestAmerica Laboratories West Sacramento Certifications/Accreditations

Certifying State	Certificate #	Certifying State	Certificate #
Alaska	UST-055	New York*	11666
Arizona	AZ0616	Oregon*	CA 200005
Arkansas	04-067-0	Pennsylvania	68-1272
California*	01119CA	South Carolina	87014002
Colorado	NA	Texas	TX 270-2004A
Connecticut	PH-0691	Utah*	QUAN1
Florida*	E87570	Virginia	00178
Georgia	960	Washington	C087
Hawaii	NA	West Virginia	9930C, 334
Kansas*	E10375	Wisconsin	998204680
Louisiana*	01944	NFESC	NA
Michigan	9947	USACE	NA
Nevada	CA44	USDA Foreign Plant	37-82605
New Jersey*	CA005	USDA Foreign Soil	S-46613

*NELAP accredited. A more detailed parameter list is available upon request. Updated 9/21/07

QC Parameter Definitions

QC Batch: The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

Method Blank: An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD): An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

Duplicate Sample (DU): Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

Surrogates: Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

Matrix Spike and Matrix Spike Duplicate (MS/MSD): An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

Isotope Dilution: For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

Control Limits: The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

Sample Summary

TestAmerica West Sacramento Project Number G8J170331

WO#	Sample #	Client Sample ID	Sampling Date	Received Date
K05DE	1	MNS-03	9/29/2008 11:45 AM	10/3/2008 09:15 AM

Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

81182

CHAIN-OF-CUSTODY RECORD

TETRA TECH

Client Name/Account #: TetraTech, Inc.

Address: 737 Bishop St., Suite 3020

City/State/Zip: Honolulu, HI 96813

Project Manager: Gary Floyd

Telephone Number: (808)533-3366 Fax No.: (808)533-3306

Sampler Name: (Print) Maren Anderson

Sampler Signature: Maren Anderson

Report To: Gary Floyd, Susan Carstenn, Yvonne Parry

Invoice To: Yvonne Parry

Project ID: Makua Shellfish Study

Project #: 100-SFO-T95M78

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Multi-incremental Sample	Preservative: Ice	Preservative: HNO_3 (Red Label)	Preservative: HCl (Blue Label)	Preservative: NaOH (Orange Label)	Preservative: H_2SO_4 Plastic (Yellow Label)	Preservative: H_2SO_4 Glass (Yellow Label)	Preservative: None (Black Label)	Preservative: Other (Specify)	Matrix: Groundwater	Matrix: Wastewater	Matrix: Drinking Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify):	Analyze For: See attached Table	Analyze For: homogenization	Analyze For: split and have Test America analyze 2nd half for QC purposes	Analyze For:	Analyze For:	Analyze For:	Analyze For:	Analyze For:	Analyze For:	RUSH TAT (Pre-Schedule)	Standard TAT
MNS -03	9/29/08	1145	11		X		X						X							X	X	X	X								X

Special Instructions: Please remove shells from sample and homogenize sample "flesh" as previously discussed. Analyte table is attached to this COC. Temperature blank is enclosed in cooler. Above sample is to be split and one half is to be sent to Test America Sacramento for split QC analysis for same analytes.

Method of Shipment: FEDEX

Laboratory Comments:

Temperature Upon Receipt: 2°C

VOCs Free of Headspace? Y N

Relinquished by:	Date	Time	Received by:	Date	Time
Maren Anderson	9.29.08	17:50	Yvonne Parry Y. PARRY	9.29.08	17:50
Relinquished by: Yvonne Parry Y. PARRY	9.30.08	13:00	Received by Laboratory: [illegible]	10-3-08	1330

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

LOT RECEIPT CHECKLIST
TestAmerica West Sacramento

CLIENT Tetra Tech PM KS LOG # 54585

LOT# (QUANTIMS ID) G8J170331 QUOTE# 81182 LOCATION ~~WT~~ (cro-bed) F-10B

		Initials	Date
DATE RECEIVED 10-3-08 TIME RECEIVED 915		AL	10-3-08
DELIVERED BY	☑ FEDEX ☐ CA OVERNIGHT ☐ CLIENT ☐ AIRBORNE ☐ GOLDENSTATE ☐ DHL ☐ UPS ☐ BAX GLOBAL ☐ GO-GETTERS ☐ TAL COURIER ☐ VALLEY LOGISTICS ☐ MORGAN HILL COURIER ☐ OTHER		
CUSTODY SEAL STATUS	☐ INTACT ☐ BROKEN ☑ N/A		
CUSTODY SEAL #(S)			
SHIPPPING CONTAINER(S)	☑ TAL ☐ CLIENT ☐ N/A		
TEMPERTURE RECORD (IN °C)	IR 4 ☐ 5 ☑ ☐ OTHER		
COC #(S)	NA		
TEMPERATURE BLANK	Observed: 0 Corrected: 2		
SAMPLE TEMPERATURE Observed: 0 1 1	Average: 1 Corrected Average: 2		
COLLECTOR'S NAME:	☑ Verified from COC ☐ Not on COC		
pH MEASURED	☐ YES ☐ ANOMALY ☑ N/A		
LABELED BY			10-17-08
LABELS CHECKED BY			
PEER REVIEW	☑ NA		
SHORT HOLD TEST NOTIFICATION	SAMPLE RECEIVING		
	WETCHEM ☑ N/A		
	VOA-ENCORES ☑ N/A		
☐ METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL	☑ N/A		
☑ COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES	☐ N/A		
☑ CLOUSEAU	☐ TEMPERATURE EXCEEDED (2 °C – 6 °C)*1 ☑ N/A		
☐ WET ICE	☐ BLUE ICE ☐ GEL PACK ☐ NO COOLING AGENTS USED	☑ PM NOTIFIED	

Notes: HTV

*1 Acceptable temperature range for State of Wisconsin samples is≤4°C.

LEAVE NO SPACES BLANK. USE "N/A" IF NOT APPLICABLE.

TestAmerica West Sacramento

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Bottle Lot Inventory

Lot ID: G8J170351

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOA*																				
VOAh*																				
AGB																				
AGBs																				
250AGB																				
250AGBs																				
250AGBn																				
500AGB																				
____AGJ																				
500AGJ																				
250AGJ																				
125AGJ																				
____CGJ																				
500CGJ																				
250CGJ																				
125CGJ	2																			
PJ																				
PJn																				
500PJ																				
500PJn																				
500PJna																				
500PJzn/na																				
250PJ																				
250PJn																				
250PJna																				
250PJzn/na																				
Acetate Tube																				
_____"CT																				
Encore																				
Folder/filter																				
PUF																				
Petri/Filter																				
XAD Trap																				
Ziploc																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

h = hydrochloric acid **s** = sulfuric acid **na** = sodium hydroxide **n** = nitric acid **zn** = zinc acetate

Number of VOAs with air bubbles present / total number of VOA's

QA-185 5/05 EM

LEAVE NO SPACES BLANK. USE "NA" IF NOT APPLICABLE.

BIOLOGIC, 8260B, VOA

Tetra Tech Inc

Client Sample ID: MNS-03

GC/MS Volatiles

Lot-Sample #...: G8J170331-001 **Work Order #...:** K05DE1A7 **Matrix.....:** BIOLOGIC
Date Sampled...: 09/29/08 **Date Received..:** 10/03/08
Prep Date.....: 10/24/08 **Analysis Date..:** 10/24/08
Prep Batch #...: 8298695
Dilution Factor: 1
% Moisture.....: 40 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzene	ND	5.0	ug/kg	0.26
Ethylbenzene	ND	5.0	ug/kg	0.34
Styrene	ND	5.0	ug/kg	0.31
Toluene	**1.1 J**	**5.0**	**ug/kg**	**0.61**
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	0.51
m-Xylene & p-Xylene	ND	10	ug/kg	0.81
o-Xylene	ND	5.0	ug/kg	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	87	(70 - 130)
1,2-Dichloroethane-d4	92	(70 - 130)
Toluene-d8	87	(70 - 130)
4-Bromofluorobenzene	72	(70 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

QC DATA ASSOCIATION SUMMARY

G8J170331

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	BIOLOGIC	SW846 8330		8297430	
	BIOLOGIC	SW846 8290		8295609	
	BIOLOGIC	SW846 8321A		8298336	
	BIOLOGIC	SW846 6020		8296157	8296108
	BIOLOGIC	SW846 8290		8295610	
	BIOLOGIC	ASTM D 2216-90		8301433	
	BIOLOGIC	SW846 7471A		8295364	8295184
	BIOLOGIC	SW846 8081A		8297336	
	BIOLOGIC	SW846 8260B		8298695	
	BIOLOGIC	SW846 8270C		8297344	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: G8J170331 **Work Order #...:** K1LQ11AA **Matrix.....:** BIOLOGIC
MB Lot-Sample #: G8J240000-695

Prep Date.....: 10/24/08
Analysis Date..: 10/24/08 **Prep Batch #...:** 8298695
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
o-Xylene	ND	5.0	ug/kg	SW846 8260B
m-Xylene & p-Xylene	ND	10	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	91	(70 - 130)
1,2-Dichloroethane-d4	96	(70 - 130)
Toluene-d8	98	(70 - 130)
4-Bromofluorobenzene	93	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: G8J170331 **Work Order #...:** K1LQ11AC **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J240000-695
Prep Date.....: 10/24/08 **Analysis Date..:** 10/24/08
Prep Batch #...: 8298695
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**111**	**(70 - 130)**	**SW846 8260B**
Ethylbenzene	**94**	**(70 - 130)**	**SW846 8260B**
Styrene	**104**	**(70 - 130)**	**SW846 8260B**
Toluene	**104**	**(70 - 130)**	**SW846 8260B**
1,2,4-Trimethylbenzene	**91**	**(70 - 130)**	**SW846 8260B**
m-Xylene & p-Xylene	**100**	**(70 - 130)**	**SW846 8260B**
o-Xylene	**100**	**(70 - 130)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	91	(70 - 130)
1,2-Dichloroethane-d4	94	(70 - 130)
Toluene-d8	99	(70 - 130)
4-Bromofluorobenzene	93	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: G8J170331 **Work Order #...:** K1LQ11AC **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J240000-695
Prep Date.....: 10/24/08 **Analysis Date..:** 10/24/08
Prep Batch #...: 8298695
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Benzene	**100**	**111**	**ug/kg**	**111**	**SW846 8260B**
Ethylbenzene	**100**	**93.7**	**ug/kg**	**94**	**SW846 8260B**
Styrene	**100**	**104**	**ug/kg**	**104**	**SW846 8260B**
Toluene	**100**	**104**	**ug/kg**	**104**	**SW846 8260B**
1,2,4-Trimethylbenzene	**100**	**91.1**	**ug/kg**	**91**	**SW846 8260B**
m-Xylene & p-Xylene	**200**	**200**	**ug/kg**	**100**	**SW846 8260B**
o-Xylene	**100**	**99.6**	**ug/kg**	**100**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	91	(70 - 130)
1,2-Dichloroethane-d4	94	(70 - 130)
Toluene-d8	99	(70 - 130)
4-Bromofluorobenzene	93	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

BIOLOGIC, 8081A, Pesticides

Tetra Tech Inc

Client Sample ID: MNS-03

GC Semivolatiles

Lot-Sample #...: G8J170331-001 **Work Order #...:** K05DE1AW **Matrix.....:** BIOLOGIC
Date Sampled...: 09/29/08 **Date Received..:** 10/03/08
Prep Date.....: 10/27/08 **Analysis Date..:** 11/05/08
Prep Batch #...: 8297336
Dilution Factor: 5.94
% Moisture.....: 40 **Method.....:** SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	30	ug/kg	0.29
Aldrin	**1.1 J**	**30**	**ug/kg**	**1.0**
beta-BHC	ND	30	ug/kg	0.95
delta-BHC	ND	30	ug/kg	1.6
gamma-BHC (Lindane)	ND	30	ug/kg	0.50
4,4'-DDT	ND	59	ug/kg	0.83
Heptachlor	ND	30	ug/kg	1.5
Heptachlor epoxide	ND	30	ug/kg	0.29

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	101	(10 - 109)
Tetrachloro-m-xylene	90	(10 - 122)

NOTE(S):

J Estimated result. Result is less than RL.

QC DATA ASSOCIATION SUMMARY

G8J170331

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	BIOLOGIC	SW846 8330		8297430	
	BIOLOGIC	SW846 8290		8295609	
	BIOLOGIC	SW846 8321A		8298336	
	BIOLOGIC	SW846 6020		8296157	8296108
	BIOLOGIC	SW846 8290		8295610	
	BIOLOGIC	ASTM D 2216-90		8301433	
	BIOLOGIC	SW846 7471A		8295364	8295184
	BIOLOGIC	SW846 8081A		8297336	
	BIOLOGIC	SW846 8260B		8298695	
	BIOLOGIC	SW846 8270C		8297344	

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: G8J170331 **Work Order #...:** K1F7D1AF **Matrix.....:** BIOLOGIC
MB Lot-Sample #: G8J230000-336

Prep Date.....: 10/27/08
Analysis Date..: 11/05/08 **Prep Batch #...:** 8297336
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aldrin	ND	5.0	ug/kg	SW846 8081A
alpha-BHC	ND	5.0	ug/kg	SW846 8081A
beta-BHC	ND	5.0	ug/kg	SW846 8081A
delta-BHC	ND	5.0	ug/kg	SW846 8081A
gamma-BHC (Lindane)	ND	5.0	ug/kg	SW846 8081A
4,4'-DDT	ND	10	ug/kg	SW846 8081A
Heptachlor	ND	5.0	ug/kg	SW846 8081A
Heptachlor epoxide	ND	5.0	ug/kg	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	91	(10 - 109)
Tetrachloro-m-xylene	80	(10 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: G8J170331 **Work Order #...:** K1F7D1AG-LCS **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J230000-336 K1F7D1AH-LCSD
Prep Date.....: 10/27/08 **Analysis Date..:** 11/05/08
Prep Batch #...: 8297336
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aldrin	**93**	**(30 - 150)**			**SW846 8081A**
	101	**(30 - 150)**	**8.8**	**(0-50)**	**SW846 8081A**
alpha-BHC	**86**	**(30 - 150)**			**SW846 8081A**
	97	**(30 - 150)**	**11**	**(0-50)**	**SW846 8081A**
beta-BHC	**91**	**(30 - 150)**			**SW846 8081A**
	100	**(30 - 150)**	**8.5**	**(0-50)**	**SW846 8081A**
delta-BHC	**64**	**(30 - 150)**			**SW846 8081A**
	72	**(30 - 150)**	**12**	**(0-50)**	**SW846 8081A**
gamma-BHC (Lindane)	**91**	**(30 - 150)**			**SW846 8081A**
	101	**(30 - 150)**	**11**	**(0-50)**	**SW846 8081A**
4,4'-DDT	**104**	**(30 - 150)**			**SW846 8081A**
	115	**(30 - 150)**	**10**	**(0-50)**	**SW846 8081A**
Heptachlor	**97**	**(30 - 150)**			**SW846 8081A**
	108	**(30 - 150)**	**11**	**(0-50)**	**SW846 8081A**
Heptachlor epoxide	**93**	**(30 - 150)**			**SW846 8081A**
	102	**(30 - 150)**	**9.1**	**(0-50)**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	82	(10 - 109)
	86	(10 - 109)
Tetrachloro-m-xylene	68	(10 - 122)
	77	(10 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: G8J170331 **Work Order #...:** K1F7D1AG-LCS **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J230000-336 K1F7D1AH-LCSD
Prep Date.....: 10/27/08 **Analysis Date..:** 11/05/08
Prep Batch #...: 8297336
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Aldrin	**8.33**	**7.73**	**ug/kg**	**93**		**SW846 8081A**
	8.33	**8.44**	**ug/kg**	**101**	**8.8**	**SW846 8081A**
alpha-BHC	**8.33**	**7.20**	**ug/kg**	**86**		**SW846 8081A**
	8.33	**8.07**	**ug/kg**	**97**	**11**	**SW846 8081A**
beta-BHC	**8.33**	**7.62**	**ug/kg**	**91**		**SW846 8081A**
	8.33	**8.29**	**ug/kg**	**100**	**8.5**	**SW846 8081A**
delta-BHC	**8.33**	**5.32**	**ug/kg**	**64**		**SW846 8081A**
	8.33	**5.98**	**ug/kg**	**72**	**12**	**SW846 8081A**
gamma-BHC (Lindane)	**8.33**	**7.56**	**ug/kg**	**91**		**SW846 8081A**
	8.33	**8.43**	**ug/kg**	**101**	**11**	**SW846 8081A**
4,4'-DDT	**16.7**	**17.4**	**ug/kg**	**104**		**SW846 8081A**
	16.7	**19.3**	**ug/kg**	**115**	**10**	**SW846 8081A**
Heptachlor	**8.33**	**8.06**	**ug/kg**	**97**		**SW846 8081A**
	8.33	**9.04**	**ug/kg**	**108**	**11**	**SW846 8081A**
Heptachlor epoxide	**8.33**	**7.79**	**ug/kg**	**93**		**SW846 8081A**
	8.33	**8.53**	**ug/kg**	**102**	**9.1**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	82	(10 - 109)
	86	(10 - 109)
Tetrachloro-m-xylene	68	(10 - 122)
	77	(10 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

BIOLOGIC, 8270C, SVOCs

Tetra Tech Inc

Client Sample ID: MNS-03

GC/MS Semivolatiles

Lot-Sample #...: G8J170331-001 **Work Order #...:** K05DE1A0 **Matrix.....:** BIOLOGIC
Date Sampled...: 09/29/08 **Date Received..:** 10/03/08
Prep Date.....: 10/27/08 **Analysis Date..:** 10/31/08
Prep Batch #...: 8297344
Dilution Factor: 1
% Moisture.....: 40 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Di-n-butyl phthalate	ND	2000	ug/kg	990
bis(2-Ethylhexyl) phthalate	ND	2000	ug/kg	990
Diethyl phthalate	ND	2000	ug/kg	990
Di-n-octyl phthalate	ND	2000	ug/kg	990
Pentachlorophenol	ND	9600	ug/kg	4800
Pyrene	ND	2000	ug/kg	990

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	76	(20 - 130)
1,2-Dichlorobenzene-d4	69	(20 - 130)
2-Fluorobiphenyl	75	(50 - 150)
2-Fluorophenol	74	(50 - 150)
Nitrobenzene-d5	77	(50 - 150)
Phenol-d5	83	(50 - 150)
Terphenyl-d14	80	(50 - 150)
2,4,6-Tribromophenol	99	(50 - 150)

QC DATA ASSOCIATION SUMMARY

G8J170331

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	BIOLOGIC	SW846 8330		8297430	
	BIOLOGIC	SW846 8290		8295609	
	BIOLOGIC	SW846 8321A		8298336	
	BIOLOGIC	SW846 6020		8296157	8296108
	BIOLOGIC	SW846 8290		8295610	
	BIOLOGIC	ASTM D 2216-90		8301433	
	BIOLOGIC	SW846 7471A		8295364	8295184
	BIOLOGIC	SW846 8081A		8297336	
	BIOLOGIC	SW846 8260B		8298695	
	BIOLOGIC	SW846 8270C		8297344	

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: G8J170331 **Work Order #...:** K1F781AA **Matrix.....:** BIOLOGIC
MB Lot-Sample #: G8J230000-344

Prep Date.....: 10/27/08
Analysis Date..: 10/31/08 **Prep Batch #...:** 8297344
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
bis(2-Ethylhexyl) phthalate	ND	2000	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	2000	ug/kg	SW846 8270C
Diethyl phthalate	ND	2000	ug/kg	SW846 8270C
Di-n-octyl phthalate	ND	2000	ug/kg	SW846 8270C
Pentachlorophenol	ND	9600	ug/kg	SW846 8270C
Pyrene	ND	2000	ug/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	62	(20 - 130)
1,2-Dichlorobenzene-d4	69	(20 - 130)
2-Fluorobiphenyl	67	(50 - 150)
2-Fluorophenol	68	(50 - 150)
Nitrobenzene-d5	67	(50 - 150)
Phenol-d5	67	(50 - 150)
Terphenyl-d14	98	(50 - 150)
2,4,6-Tribromophenol	67	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: G8J170331 **Work Order #...:** K1F781AE-LCS **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J230000-344 K1F781AF-LCSD
Prep Date.....: 10/27/08 **Analysis Date..:** 10/31/08
Prep Batch #...: 8297344
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Pentachlorophenol	**75**	**(50 - 150)**			**SW846 8270C**
	80	**(50 - 150)**	**5.3**	**(0-50)**	**SW846 8270C**
Pyrene	**86**	**(50 - 150)**			**SW846 8270C**
	81	**(50 - 150)**	**6.0**	**(0-50)**	**SW846 8270C**
bis(2-Ethylhexyl) phthalate	**80**	**(50 - 150)**			**SW846 8270C**
	84	**(50 - 150)**	**4.6**	**(0-50)**	**SW846 8270C**
Diethyl phthalate	**79**	**(50 - 150)**			**SW846 8270C**
	86	**(50 - 150)**	**8.3**	**(0-50)**	**SW846 8270C**
Di-n-butyl phthalate	**80**	**(50 - 150)**			**SW846 8270C**
	84	**(50 - 150)**	**4.3**	**(0-50)**	**SW846 8270C**
Di-n-octyl phthalate	**76**	**(50 - 150)**			**SW846 8270C**
	82	**(50 - 150)**	**7.8**	**(0-50)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	78	(20 - 130)
	75	(20 - 130)
1,2-Dichlorobenzene-d4	74	(20 - 130)
	75	(20 - 130)
2-Fluorobiphenyl	73	(50 - 150)
	77	(50 - 150)
2-Fluorophenol	78	(50 - 150)
	78	(50 - 150)
Nitrobenzene-d5	71	(50 - 150)
	74	(50 - 150)
Phenol-d5	83	(50 - 150)
	76	(50 - 150)
Terphenyl-d14	86	(50 - 150)
	84	(50 - 150)
2,4,6-Tribromophenol	82	(50 - 150)
	93	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: G8J170331 **Work Order #...:** K1F781AE-LCS **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J230000-344 K1F781AF-LCSD
Prep Date.....: 10/27/08 **Analysis Date..:** 10/31/08
Prep Batch #...: 8297344
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Pentachlorophenol	**3330**	**2510**	**ug/kg**	**75**		**SW846 8270C**
	3330	**2650**	**ug/kg**	**80**	**5.3**	**SW846 8270C**
Pyrene	**3330**	**2850**	**ug/kg**	**86**		**SW846 8270C**
	3330	**2680**	**ug/kg**	**81**	**6.0**	**SW846 8270C**
bis(2-Ethylhexyl) phthalate	**3330**	**2680**	**ug/kg**	**80**		**SW846 8270C**
	3330	**2800**	**ug/kg**	**84**	**4.6**	**SW846 8270C**
Diethyl phthalate	**3330**	**2630**	**ug/kg**	**79**		**SW846 8270C**
	3330	**2860**	**ug/kg**	**86**	**8.3**	**SW846 8270C**
Di-n-butyl phthalate	**3330**	**2680**	**ug/kg**	**80**		**SW846 8270C**
	3330	**2800**	**ug/kg**	**84**	**4.3**	**SW846 8270C**
Di-n-octyl phthalate	**3330**	**2530**	**ug/kg**	**76**		**SW846 8270C**
	3330	**2730**	**ug/kg**	**82**	**7.8**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	78	(20 - 130)
	75	(20 - 130)
1,2-Dichlorobenzene-d4	74	(20 - 130)
	75	(20 - 130)
2-Fluorobiphenyl	73	(50 - 150)
	77	(50 - 150)
2-Fluorophenol	78	(50 - 150)
	78	(50 - 150)
Nitrobenzene-d5	71	(50 - 150)
	74	(50 - 150)
Phenol-d5	83	(50 - 150)
	76	(50 - 150)
Terphenyl-d14	86	(50 - 150)
	84	(50 - 150)
2,4,6-Tribromophenol	82	(50 - 150)
	93	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

BIOLOGIC, 8330, Explosives

Tetra Tech Inc

Client Sample ID: MNS-03

HPLC

Lot-Sample #...:	G8J170331-001	**Work Order #...:**	K05DE1AX	**Matrix.....:**	BIOLOGIC
Date Sampled...:	09/29/08	**Date Received..:**	10/03/08		
Prep Date.....:	10/23/08	**Analysis Date..:**	11/04/08		
Prep Batch #...:	8297430				
Dilution Factor:	1				
% Moisture.....:	40	**Method.....:**	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroglycerin	ND	0.50	mg/kg	0.070
2,4-Dinitrotoluene	ND	0.25	mg/kg	0.028
RDX	ND	0.25	mg/kg	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(74 - 117)

QC DATA ASSOCIATION SUMMARY

G8J170331

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	BIOLOGIC	SW846 8330		8297430	
	BIOLOGIC	SW846 8290		8295609	
	BIOLOGIC	SW846 8321A		8298336	
	BIOLOGIC	SW846 6020		8296157	8296108
	BIOLOGIC	SW846 8290		8295610	
	BIOLOGIC	ASTM D 2216-90		8301433	
	BIOLOGIC	SW846 7471A		8295364	8295184
	BIOLOGIC	SW846 8081A		8297336	
	BIOLOGIC	SW846 8260B		8298695	
	BIOLOGIC	SW846 8270C		8297344	

METHOD BLANK REPORT

HPLC

Client Lot #...: G8J170331 **Work Order #...:** K1GX61AA **Matrix.....:** BIOLOGIC
MB Lot-Sample #: G8J230000-430

Prep Date.....: 10/23/08
Analysis Date..: 11/04/08 **Prep Batch #...:** 8297430
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dinitrotoluene	ND	0.25	mg/kg	SW846 8330
Nitroglycerin	ND	0.50	mg/kg	SW846 8330
RDX	ND	0.25	mg/kg	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(74 - 117)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G8J170331 **Work Order #...:** K1GX61AC-LCS **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J230000-430 K1GX61AD-LCSD
Prep Date.....: 10/23/08 **Analysis Date..:** 11/04/08
Prep Batch #...: 8297430
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2,4-Dinitrotoluene	**102**	**(25 - 150)**			**SW846 8330**
	103	**(25 - 150)**	**1.6**	**(0-35)**	**SW846 8330**
Nitroglycerin	**103**	**(25 - 150)**			**SW846 8330**
	97	**(25 - 150)**	**5.8**	**(0-35)**	**SW846 8330**
RDX	**103**	**(25 - 150)**			**SW846 8330**
	107	**(25 - 150)**	**4.0**	**(0-35)**	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(74 - 117)
	95	(74 - 117)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G8J170331 **Work Order #...:** K1GX61AC-LCS **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J230000-430 K1GX61AD-LCSD
Prep Date.....: 10/23/08 **Analysis Date..:** 11/04/08
Prep Batch #...: 8297430
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
2,4-Dinitrotoluene	**1.00**	**1.02**	**mg/kg**	**102**		**SW846 8330**
	1.00	**1.03**	**mg/kg**	**103**	**1.6**	**SW846 8330**
Nitroglycerin	**5.00**	**5.14**	**mg/kg**	**103**		**SW846 8330**
	5.00	**4.85**	**mg/kg**	**97**	**5.8**	**SW846 8330**
RDX	**1.00**	**1.03**	**mg/kg**	**103**		**SW846 8330**
	1.00	**1.07**	**mg/kg**	**107**	**4.0**	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(74 - 117)
	95	(74 - 117)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

BIOLOGIC, 8321A, Perchlorate

Tetra Tech Inc

Client Sample ID: MNS-03

HPLC

Lot-Sample #...:	G8J170331-001	**Work Order #...:**	K05DE1DE	**Matrix.....:**	BIOLOGIC
Date Sampled...:	09/29/08	**Date Received..:**	10/03/08		
Prep Date.....:	10/24/08	**Analysis Date..:**	10/31/08		
Prep Batch #...:	8298336				
Dilution Factor:	1				
% Moisture.....:	40	**Method.....:**	SW846 8321A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	30	ug/kg	15

QC DATA ASSOCIATION SUMMARY

G8J170331

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	BIOLOGIC	SW846 8330		8297430	
	BIOLOGIC	SW846 8290		8295609	
	BIOLOGIC	SW846 8321A		8298336	
	BIOLOGIC	SW846 6020		8296157	8296108
	BIOLOGIC	SW846 8290		8295610	
	BIOLOGIC	ASTM D 2216-90		8301433	
	BIOLOGIC	SW846 7471A		8295364	8295184
	BIOLOGIC	SW846 8081A		8297336	
	BIOLOGIC	SW846 8260B		8298695	
	BIOLOGIC	SW846 8270C		8297344	

METHOD BLANK REPORT

HPLC

Client Lot #...: G8J170331 **Work Order #...:** K1JKV1AA **Matrix.....:** BIOLOGIC
MB Lot-Sample #: G8J240000-336
Prep Date.....: 10/24/08
Analysis Date..: 10/31/08 **Prep Batch #...:** 8298336
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Perchlorate	ND	30	ug/kg	SW846 8321A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G8J170331 **Work Order #...:** K1JKV1AC-LCS **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J240000-336 K1JKV1AD-LCSD
Prep Date.....: 10/24/08 **Analysis Date..:** 10/31/08
Prep Batch #...: 8298336
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	**97**	**(70 - 130)**			**SW846 8321A**
	100	**(70 - 130)**	**2.8**	**(0-30)**	**SW846 8321A**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G8J170331 **Work Order #...:** K1JKV1AC-LCS **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J240000-336 K1JKV1AD-LCSD
Prep Date.....: 10/24/08 **Analysis Date..:** 10/31/08
Prep Batch #...: 8298336
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Perchlorate	**10.0**	**9.74**	**ug/kg**	**97**		**SW846 8321A**
	10.0	**10.0**	**ug/kg**	**100**	**2.8**	**SW846 8321A**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

BIOLOGIC, 8290, Dioxins/Furans

Tetra Tech Inc

Client Sample ID: MNS-03

Trace Level Organic Compounds

Lot-Sample #...: G8J170331-001 **Work Order #...:** K05DE1A1 **Matrix.....:** BIOLOGIC
Date Sampled...: 09/29/08 **Date Received..:** 10/03/08
Prep Date.....: 10/21/08 **Analysis Date..:** 10/25/08
Prep Batch #...: 8295609
Dilution Factor: 1
% Moisture.....: 40

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	0.53	pg/g	SW846 8290
Total TCDD	ND	0.53	pg/g	SW846 8290
1,2,3,7,8-PeCDD	ND	0.90	pg/g	SW846 8290
Total PeCDD	ND	0.90	pg/g	SW846 8290
1,2,3,4,7,8-HxCDD	ND	0.57	pg/g	SW846 8290
1,2,3,6,7,8-HxCDD	ND	0.56	pg/g	SW846 8290
1,2,3,7,8,9-HxCDD	ND	0.54	pg/g	SW846 8290
Total HxCDD	ND	0.57	pg/g	SW846 8290
1,2,3,4,6,7,8-HpCDD	ND	1.4	pg/g	SW846 8290
Total HpCDD	ND	1.4	pg/g	SW846 8290
OCDD	**8.0 J**		**pg/g**	**SW846 8290**
2,3,7,8-TCDF	ND	0.46	pg/g	SW846 8290
Total TCDF	ND	0.46	pg/g	SW846 8290
1,2,3,7,8-PeCDF	ND	0.56	pg/g	SW846 8290
2,3,4,7,8-PeCDF	ND	0.58	pg/g	SW846 8290
Total PeCDF	ND	0.58	pg/g	SW846 8290
1,2,3,4,7,8-HxCDF	ND	0.37	pg/g	SW846 8290
1,2,3,6,7,8-HxCDF	ND	0.36	pg/g	SW846 8290
2,3,4,6,7,8-HxCDF	ND	0.37	pg/g	SW846 8290
1,2,3,7,8,9-HxCDF	ND	0.42	pg/g	SW846 8290
Total HxCDF	ND	0.42	pg/g	SW846 8290
1,2,3,4,6,7,8-HpCDF	ND	0.37	pg/g	SW846 8290
1,2,3,4,7,8,9-HpCDF	ND	0.47	pg/g	SW846 8290
Total HpCDF	ND	0.47	pg/g	SW846 8290
OCDF	ND	1.1	pg/g	SW846 8290

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	91	(40 - 135)
13C-1,2,3,7,8-PeCDD	94	(40 - 135)
13C-1,2,3,6,7,8-HxCDD	85	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDD	86	(40 - 135)
13C-OCDD	74	(40 - 135)
13C-2,3,7,8-TCDF	81	(40 - 135)
13C-1,2,3,7,8-PeCDF	94	(40 - 135)
13C-1,2,3,4,7,8-HxCDF	92	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDF	86	(40 - 135)

NOTE(S):

J Estimated result. Result is less than the reporting limit.

QC DATA ASSOCIATION SUMMARY

G8J170331

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	BIOLOGIC	SW846 8330		8297430	
	BIOLOGIC	SW846 8290		8295609	
	BIOLOGIC	SW846 8321A		8298336	
	BIOLOGIC	SW846 6020		8296157	8296108
	BIOLOGIC	SW846 8290		8295610	
	BIOLOGIC	ASTM D 2216-90		8301433	
	BIOLOGIC	SW846 7471A		8295364	8295184
	BIOLOGIC	SW846 8081A		8297336	
	BIOLOGIC	SW846 8260B		8298695	
	BIOLOGIC	SW846 8270C		8297344	

METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: G8J170331 **Work Order #...:** K1AV41AA **Matrix.....:** BIOLOGIC
MB Lot-Sample #: G8J210000-609

Prep Date.....: 10/21/08
Analysis Date..: 10/25/08 **Prep Batch #...:** 8295609
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	0.60	pg/g	SW846 8290
Total TCDD	ND	0.60	pg/g	SW846 8290
1,2,3,7,8-PeCDD	ND	1.1	pg/g	SW846 8290
Total PeCDD	ND	1.1	pg/g	SW846 8290
1,2,3,4,7,8-HxCDD	ND	0.66	pg/g	SW846 8290
1,2,3,6,7,8-HxCDD	ND	0.65	pg/g	SW846 8290
1,2,3,7,8,9-HxCDD	ND	0.62	pg/g	SW846 8290
Total HxCDD	ND	0.66	pg/g	SW846 8290
1,2,3,4,6,7,8-HpCDD	ND	0.78	pg/g	SW846 8290
Total HpCDD	ND	0.78	pg/g	SW846 8290
OCDD	ND	1.1	pg/g	SW846 8290
2,3,7,8-TCDF	ND	0.53	pg/g	SW846 8290
Total TCDF	ND	0.53	pg/g	SW846 8290
1,2,3,7,8-PeCDF	ND	0.70	pg/g	SW846 8290
2,3,4,7,8-PeCDF	ND	0.72	pg/g	SW846 8290
Total PeCDF	ND	0.72	pg/g	SW846 8290
1,2,3,4,7,8-HxCDF	ND	0.41	pg/g	SW846 8290
1,2,3,6,7,8-HxCDF	ND	0.41	pg/g	SW846 8290
2,3,4,6,7,8-HxCDF	ND	0.41	pg/g	SW846 8290
1,2,3,7,8,9-HxCDF	ND	0.47	pg/g	SW846 8290
Total HxCDF	ND	0.47	pg/g	SW846 8290
1,2,3,4,6,7,8-HpCDF	ND	0.42	pg/g	SW846 8290
1,2,3,4,7,8,9-HpCDF	ND	0.53	pg/g	SW846 8290
Total HpCDF	ND	0.53	pg/g	SW846 8290
OCDF	ND	0.97	pg/g	SW846 8290

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	86	(40 - 135)
13C-1,2,3,7,8-PeCDD	92	(40 - 135)
13C-1,2,3,6,7,8-HxCDD	89	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDD	90	(40 - 135)
13C-OCDD	94	(40 - 135)
13C-2,3,7,8-TCDF	83	(40 - 135)
13C-1,2,3,7,8-PeCDF	92	(40 - 135)
13C-1,2,3,4,7,8-HxCDF	90	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDF	88	(40 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Trace Level Organic Compounds

Client Lot #...: G8J170331 **Work Order #...:** K1AV41AC **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J210000-609
Prep Date.....: 10/21/08 **Analysis Date..:** 10/25/08
Prep Batch #...: 8295609
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,3,7,8-TCDD	**90**	**(50 - 150)**	**SW846 8290**
1,2,3,7,8-PeCDD	**97**	**(50 - 150)**	**SW846 8290**
1,2,3,4,7,8-HxCDD	**101**	**(50 - 150)**	**SW846 8290**
1,2,3,6,7,8-HxCDD	**95**	**(50 - 150)**	**SW846 8290**
1,2,3,7,8,9-HxCDD	**103**	**(50 - 150)**	**SW846 8290**
1,2,3,4,6,7,8-HpCDD	**93**	**(50 - 150)**	**SW846 8290**
OCDD	**94**	**(50 - 150)**	**SW846 8290**
2,3,7,8-TCDF	**90**	**(50 - 150)**	**SW846 8290**
1,2,3,7,8-PeCDF	**92**	**(50 - 150)**	**SW846 8290**
2,3,4,7,8-PeCDF	**93**	**(50 - 150)**	**SW846 8290**
1,2,3,4,7,8-HxCDF	**88**	**(50 - 150)**	**SW846 8290**
1,2,3,6,7,8-HxCDF	**92**	**(50 - 150)**	**SW846 8290**
2,3,4,6,7,8-HxCDF	**90**	**(50 - 150)**	**SW846 8290**
1,2,3,7,8,9-HxCDF	**99**	**(50 - 150)**	**SW846 8290**
1,2,3,4,6,7,8-HpCDF	**94**	**(50 - 150)**	**SW846 8290**
1,2,3,4,7,8,9-HpCDF	**101**	**(50 - 150)**	**SW846 8290**
OCDF	**91**	**(50 - 150)**	**SW846 8290**

INTERNAL STANDARD	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	86	(40 - 135)
13C-1,2,3,7,8-PeCDD	96	(40 - 135)
13C-1,2,3,6,7,8-HxCDD	84	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDD	97	(40 - 135)
13C-OCDD	105	(40 - 135)
13C-2,3,7,8-TCDF	81	(40 - 135)
13C-1,2,3,7,8-PeCDF	93	(40 - 135)
13C-1,2,3,4,7,8-HxCDF	90	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDF	84	(40 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

Trace Level Organic Compounds

Client Lot #...: G8J170331 **Work Order #...:** K1AV41AC **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J210000-609
Prep Date.....: 10/21/08 **Analysis Date..:** 10/25/08
Prep Batch #...: 8295609
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
2,3,7,8-TCDD	**20.0**	**18.1**	**pg/g**	**90**	**SW846 8290**
1,2,3,7,8-PeCDD	**100**	**97.2**	**pg/g**	**97**	**SW846 8290**
1,2,3,4,7,8-HxCDD	**100**	**101**	**pg/g**	**101**	**SW846 8290**
1,2,3,6,7,8-HxCDD	**100**	**95.3**	**pg/g**	**95**	**SW846 8290**
1,2,3,7,8,9-HxCDD	**100**	**103**	**pg/g**	**103**	**SW846 8290**
1,2,3,4,6,7,8-HpCDD	**100**	**93.3**	**pg/g**	**93**	**SW846 8290**
OCDD	**200**	**189**	**pg/g**	**94**	**SW846 8290**
2,3,7,8-TCDF	**20.0**	**17.9**	**pg/g**	**90**	**SW846 8290**
1,2,3,7,8-PeCDF	**100**	**92.3**	**pg/g**	**92**	**SW846 8290**
2,3,4,7,8-PeCDF	**100**	**93.0**	**pg/g**	**93**	**SW846 8290**
1,2,3,4,7,8-HxCDF	**100**	**87.8**	**pg/g**	**88**	**SW846 8290**
1,2,3,6,7,8-HxCDF	**100**	**92.0**	**pg/g**	**92**	**SW846 8290**
2,3,4,6,7,8-HxCDF	**100**	**89.8**	**pg/g**	**90**	**SW846 8290**
1,2,3,7,8,9-HxCDF	**100**	**99.0**	**pg/g**	**99**	**SW846 8290**
1,2,3,4,6,7,8-HpCDF	**100**	**93.6**	**pg/g**	**94**	**SW846 8290**
1,2,3,4,7,8,9-HpCDF	**100**	**101**	**pg/g**	**101**	**SW846 8290**
OCDF	**200**	**181**	**pg/g**	**91**	**SW846 8290**

INTERNAL STANDARD	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	86	(40 - 135)
13C-1,2,3,7,8-PeCDD	96	(40 - 135)
13C-1,2,3,6,7,8-HxCDD	84	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDD	97	(40 - 135)
13C-OCDD	105	(40 - 135)
13C-2,3,7,8-TCDF	81	(40 - 135)
13C-1,2,3,7,8-PeCDF	93	(40 - 135)
13C-1,2,3,4,7,8-HxCDF	90	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDF	84	(40 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

BIOLOGIC,
Metals - Various Methods

Tetra Tech Inc

Client Sample ID: MNS-03

TOTAL Metals

Lot-Sample #...: G8J170331-001 **Matrix.....:** BIOLOGIC
Date Sampled...: 09/29/08 **Date Received..:** 10/03/08
% Moisture.....: 40

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8295364						
Mercury	ND	0.040	mg/kg	SW846 7471A	10/21-10/22/08	K05DE1AV
		Dilution Factor: 1		MDL.....: 0.020		
Prep Batch #...: 8296157						
Silver	ND	0.50	mg/kg	SW846 6020	10/22-10/28/08	K05DE1AH
		Dilution Factor: 5		MDL.....: 0.050		
Aluminum	**72.4**	**50.0**	**mg/kg**	**SW846 6020**	**10/22-10/29/08**	**K05DE1AA**
		Dilution Factor: 10		MDL.....: 1.6		
Arsenic	**0.47 B**	**1.0**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K05DE1AC**
		Dilution Factor: 5		MDL.....: 0.40		
Barium	**1.1**	**0.50**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K05DE1AD**
		Dilution Factor: 5		MDL.....: 0.20		
Beryllium	ND	0.50	mg/kg	SW846 6020	10/22-10/28/08	K05DE1AE
		Dilution Factor: 5		MDL.....: 0.050		
Cadmium	ND	0.50	mg/kg	SW846 6020	10/22-10/28/08	K05DE1AF
		Dilution Factor: 5		MDL.....: 0.25		
Cobalt	**0.37 B**	**0.50**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K05DE1AG**
		Dilution Factor: 5		MDL.....: 0.050		
Chromium	**1.2 J**	**1.0**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K05DE1AJ**
		Dilution Factor: 5		MDL.....: 0.24		
Copper	**1.6 J**	**1.0**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K05DE1AK**
		Dilution Factor: 5		MDL.....: 0.055		
Iron	**47.2 J**	**25.0**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K05DE1AL**
		Dilution Factor: 5		MDL.....: 5.5		
Manganese	**3.1**	**0.50**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K05DE1AM**
		Dilution Factor: 5		MDL.....: 0.050		
Lead	ND	0.50	mg/kg	SW846 6020	10/22-10/28/08	K05DE1AN
		Dilution Factor: 5		MDL.....: 0.25		

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Tetra Tech Inc

Client Sample ID: MNS-03

TOTAL Metals

Lot-Sample #...: G8J170331-001 **Matrix.....:** BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	ND	1.0	mg/kg	SW846 6020	10/22-10/28/08	K05DE1AP
		Dilution Factor: 5		MDL.....: 0.050		
Selenium	**0.49 B,J**	**1.0**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K05DE1AQ**
		Dilution Factor: 5		MDL.....: 0.12		
Thallium	ND	0.50	mg/kg	SW846 6020	10/22-10/28/08	K05DE1AR
		Dilution Factor: 5		MDL.....: 0.18		
Vanadium	ND	5.0	mg/kg	SW846 6020	10/22-10/28/08	K05DE1AT
		Dilution Factor: 5		MDL.....: 2.2		
Zinc	**7.2 J**	**2.5**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K05DE1AU**
		Dilution Factor: 5		MDL.....: 1.2		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

QC DATA ASSOCIATION SUMMARY

G8J170331

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	BIOLOGIC	SW846 6020		8296157	8296108
	BIOLOGIC	SW846 7471A		8295364	8295184

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: G8J170331 **Matrix.....:** BIOLOGIC

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: G8J210000-364 **Prep Batch #...:** 8295364						
Mercury	ND	0.040	mg/kg	SW846 7471A	10/21-10/22/08	K09EP1AA
		Dilution Factor: 1				
MB Lot-Sample #: G8J220000-157 **Prep Batch #...:** 8296157						
Aluminum	ND	5.0	mg/kg	SW846 6020	10/22-10/29/08	K1CCL1AA
		Dilution Factor: 1				
Antimony	ND	0.20	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AP
		Dilution Factor: 1				
Arsenic	ND	0.20	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AC
		Dilution Factor: 1				
Barium	ND	0.10	mg/kg	SW846 6020	10/22-11/04/08	K1CCL1AD
		Dilution Factor: 1				
Beryllium	ND	0.10	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AE
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AF
		Dilution Factor: 1				
Chromium	**0.19 B**	**0.20**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1CCL1AJ**
		Dilution Factor: 1				
Cobalt	ND	0.10	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AG
		Dilution Factor: 1				
Copper	**0.18 B**	**0.20**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1CCL1AK**
		Dilution Factor: 1				
Iron	**3.8 B**	**5.0**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1CCL1AL**
		Dilution Factor: 1				
Lead	ND	0.10	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AN
		Dilution Factor: 1				
Manganese	ND	0.10	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AM
		Dilution Factor: 1				
Selenium	**0.060 B**	**0.20**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1CCL1AQ**
		Dilution Factor: 1				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: G8J170331 **Matrix.....:** BIOLOGIC

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	**0.024 B**	**0.10**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1CCL1AH**
		Dilution Factor: 1				
Thallium	ND	0.10	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AR
		Dilution Factor: 1				
Vanadium	ND	1.0	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AT
		Dilution Factor: 1				
Zinc	**0.38 B**	**0.50**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1CCL1AU**
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: G8J170331 **Matrix.....:** BIOLOGIC

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: G8J210000-364 **Prep Batch #...:** 8295364					
Mercury	98	(80 - 120)	SW846 7471A Dilution Factor: 1	10/21-10/22/08	K09EP1AC
LCS Lot-Sample#: G8J220000-157 **Prep Batch #...:** 8296157					
Aluminum	106	(80 - 120)	SW846 6020 Dilution Factor: 1	10/22-10/29/08	K1CCL1AV
Arsenic	94	(80 - 120)	SW846 6020 Dilution Factor: 1	10/22-10/28/08	K1CCL1AW
Barium	95	(80 - 120)	SW846 6020 Dilution Factor: 1	10/22-10/28/08	K1CCL1AX
Beryllium	99	(80 - 120)	SW846 6020 Dilution Factor: 1	10/22-10/28/08	K1CCL1A0
Cadmium	96	(80 - 120)	SW846 6020 Dilution Factor: 1	10/22-10/28/08	K1CCL1A1
Cobalt	101	(80 - 120)	SW846 6020 Dilution Factor: 1	10/22-10/28/08	K1CCL1A2
Silver	94	(80 - 120)	SW846 6020 Dilution Factor: 1	10/22-10/28/08	K1CCL1A3
Chromium	105	(80 - 120)	SW846 6020 Dilution Factor: 1	10/22-10/28/08	K1CCL1A4
Copper	104	(80 - 120)	SW846 6020 Dilution Factor: 1	10/22-10/28/08	K1CCL1A5
Iron	113	(80 - 120)	SW846 6020 Dilution Factor: 1	10/22-10/28/08	K1CCL1A6
Manganese	104	(80 - 120)	SW846 6020 Dilution Factor: 1	10/22-10/28/08	K1CCL1A7
Lead	96	(80 - 120)	SW846 6020 Dilution Factor: 1	10/22-10/28/08	K1CCL1A8

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: G8J170331 **Matrix.....:** BIOLOGIC

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	96	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1A9
		Dilution Factor: 1			
Selenium	97	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1CA
		Dilution Factor: 1			
Thallium	97	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1CC
		Dilution Factor: 1			
Vanadium	89	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1CD
		Dilution Factor: 1			
Zinc	104	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1CE
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: G8J170331 **Matrix.....:** BIOLOGIC

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: G8J210000-364 **Prep Batch #...:** 8295364							
Mercury	0.0833	0.0815	mg/kg	98	SW846 7471A	10/21-10/22/08	K09EP1AC
			Dilution Factor: 1				
LCS Lot-Sample#: G8J220000-157 **Prep Batch #...:** 8296157							
Aluminum	100	106	mg/kg	106	SW846 6020	10/22-10/29/08	K1CCL1AV
			Dilution Factor: 1				
Arsenic	20.0	18.9	mg/kg	94	SW846 6020	10/22-10/28/08	K1CCL1AW
			Dilution Factor: 1				
Barium	20.0	19.0	mg/kg	95	SW846 6020	10/22-10/28/08	K1CCL1AX
			Dilution Factor: 1				
Beryllium	20.0	19.7	mg/kg	99	SW846 6020	10/22-10/28/08	K1CCL1A0
			Dilution Factor: 1				
Cadmium	20.0	19.2	mg/kg	96	SW846 6020	10/22-10/28/08	K1CCL1A1
			Dilution Factor: 1				
Cobalt	20.0	20.2	mg/kg	101	SW846 6020	10/22-10/28/08	K1CCL1A2
			Dilution Factor: 1				
Silver	5.00	4.72	mg/kg	94	SW846 6020	10/22-10/28/08	K1CCL1A3
			Dilution Factor: 1				
Chromium	20.0	21.1	mg/kg	105	SW846 6020	10/22-10/28/08	K1CCL1A4
			Dilution Factor: 1				
Copper	20.0	20.8	mg/kg	104	SW846 6020	10/22-10/28/08	K1CCL1A5
			Dilution Factor: 1				
Iron	100	113	mg/kg	113	SW846 6020	10/22-10/28/08	K1CCL1A6
			Dilution Factor: 1				
Manganese	20.0	20.7	mg/kg	104	SW846 6020	10/22-10/28/08	K1CCL1A7
			Dilution Factor: 1				
Lead	20.0	19.1	mg/kg	96	SW846 6020	10/22-10/28/08	K1CCL1A8
			Dilution Factor: 1				

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: G8J170331 **Matrix.....:** BIOLOGIC

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	5.00	4.79	mg/kg	96	SW846 6020	10/22-10/28/08	K1CCL1A9
			Dilution Factor: 1				
Selenium	20.0	19.3	mg/kg	97	SW846 6020	10/22-10/28/08	K1CCL1CA
			Dilution Factor: 1				
Thallium	5.00	4.84	mg/kg	97	SW846 6020	10/22-10/28/08	K1CCL1CC
			Dilution Factor: 1				
Vanadium	20.0	17.8	mg/kg	89	SW846 6020	10/22-10/28/08	K1CCL1CD
			Dilution Factor: 1				
Zinc	20.0	20.8	mg/kg	104	SW846 6020	10/22-10/28/08	K1CCL1CE
			Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: G8J170331 **Matrix.....:** BIOLOGIC
Date Sampled...: 09/29/08 **Date Received..:** 10/03/08

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: G8J170331-001 **Prep Batch #...:** 8295364						**% Moisture.....:** 40	
Mercury	112	(80 - 120)			SW846 7471A	10/21-10/22/08	K05DE1A5
	106	(80 - 120)	5.2	(0-35)	SW846 7471A	10/21-10/22/08	K05DE1A6
		Dilution Factor: 1					
MS Lot-Sample #: G8J170331-001 **Prep Batch #...:** 8296157						**% Moisture.....:** 40	
Aluminum	92	(80 - 120)			SW846 6020	10/22-10/29/08	K05DE1A8
	113	(80 - 120)	9.0	(0-35)	SW846 6020	10/22-10/29/08	K05DE1A9
		Dilution Factor: 10					
Antimony	81	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1C2
	80	(80 - 120)	2.4	(0-35)	SW846 6020	10/22-10/28/08	K05DE1C3
		Dilution Factor: 5					
Arsenic	83	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CA
	80	(80 - 120)	4.6	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CC
		Dilution Factor: 5					
Barium	83	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CD
	78 N	(80 - 120)	6.1	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CE
		Dilution Factor: 5					
Beryllium	80	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CF
	80	(80 - 120)	2.2	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CG
		Dilution Factor: 5					
Cadmium	83	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CH
	81	(80 - 120)	3.5	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CJ
		Dilution Factor: 5					
Chromium	84	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CP
	85	(80 - 120)	0.49	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CQ
		Dilution Factor: 5					
Cobalt	82	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CK
	81	(80 - 120)	1.7	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CL
		Dilution Factor: 5					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: G8J170331 **Matrix.....:** BIOLOGIC
Date Sampled...: 09/29/08 **Date Received..:** 10/03/08

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	81	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CR
	82	(80 - 120)	0.12	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CT
		Dilution Factor: 5					
Iron	108	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CU
	98	(80 - 120)	6.5	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CV
		Dilution Factor: 5					
Lead	79 N	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1C0
	76 N	(80 - 120)	5.0	(0-35)	SW846 6020	10/22-10/28/08	K05DE1C1
		Dilution Factor: 5					
Manganese	85	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CW
	78 N	(80 - 120)	6.8	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CX
		Dilution Factor: 5					
Selenium	79 N	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1C4
	77 N	(80 - 120)	4.0	(0-35)	SW846 6020	10/22-10/28/08	K05DE1C5
		Dilution Factor: 5					
Silver	76 N	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CM
	77 N	(80 - 120)	0.34	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CN
		Dilution Factor: 5					
Thallium	84	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1C6
	78 N	(80 - 120)	8.5	(0-35)	SW846 6020	10/22-10/28/08	K05DE1C7
		Dilution Factor: 5					
Vanadium	79 N	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1C8
	77 N	(80 - 120)	3.4	(0-35)	SW846 6020	10/22-10/28/08	K05DE1C9
		Dilution Factor: 5					
Zinc	83	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1DA
	81	(80 - 120)	2.2	(0-35)	SW846 6020	10/22-10/28/08	K05DE1DC
		Dilution Factor: 5					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: G8J170331 **Matrix.....:** BIOLOGIC
Date Sampled...: 09/29/08 **Date Received..:** 10/03/08

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: G8J170331-001 **Prep Batch #...:** 8295364								**% Moisture.....:** 40	
Mercury									
	ND	0.250	0.281	mg/kg	112		SW846 7471A	10/21-10/22/08	K05DE1A5
	ND	0.250	0.267	mg/kg	106	5.2	SW846 7471A	10/21-10/22/08	K05DE1A6
			Dilution Factor: 1						
MS Lot-Sample #: G8J170331-001 **Prep Batch #...:** 8296157								**% Moisture.....:** 40	
Aluminum									
	72.4	59.9	128	mg/kg	92		SW846 6020	10/22-10/29/08	K05DE1A8
	72.4	59.2	139	mg/kg	113	9.0	SW846 6020	10/22-10/29/08	K05DE1A9
			Dilution Factor: 10						
Antimony									
	ND	2.99	2.42	mg/kg	81		SW846 6020	10/22-10/28/08	K05DE1C2
	ND	2.96	2.36	mg/kg	80	2.4	SW846 6020	10/22-10/28/08	K05DE1C3
			Dilution Factor: 5						
Arsenic									
	0.47	12.0	10.4	mg/kg	83		SW846 6020	10/22-10/28/08	K05DE1CA
	0.47	11.8	9.90	mg/kg	80	4.6	SW846 6020	10/22-10/28/08	K05DE1CC
			Dilution Factor: 5						
Barium									
	1.1	12.0	11.0	mg/kg	83		SW846 6020	10/22-10/28/08	K05DE1CD
	1.1	11.8	10.4 N	mg/kg	78	6.1	SW846 6020	10/22-10/28/08	K05DE1CE
			Dilution Factor: 5						
Beryllium									
	ND	12.0	9.63	mg/kg	80		SW846 6020	10/22-10/28/08	K05DE1CF
	ND	11.8	9.42	mg/kg	80	2.2	SW846 6020	10/22-10/28/08	K05DE1CG
			Dilution Factor: 5						
Cadmium									
	ND	12.0	10.0	mg/kg	83		SW846 6020	10/22-10/28/08	K05DE1CH
	ND	11.8	9.66	mg/kg	81	3.5	SW846 6020	10/22-10/28/08	K05DE1CJ
			Dilution Factor: 5						
Chromium									
	1.2	12.0	11.3	mg/kg	84		SW846 6020	10/22-10/28/08	K05DE1CP
	1.2	11.8	11.2	mg/kg	85	0.49	SW846 6020	10/22-10/28/08	K05DE1CQ
			Dilution Factor: 5						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: G8J170331 **Matrix.....:** BIOLOGIC
Date Sampled...: 09/29/08 **Date Received..:** 10/03/08

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cobalt									
	0.37	12.0	10.1	mg/kg	82		SW846 6020	10/22-10/28/08	K05DE1CK
	0.37	11.8	9.96	mg/kg	81	1.7	SW846 6020	10/22-10/28/08	K05DE1CL
			Dilution Factor: 5						
Copper									
	1.6	12.0	11.3	mg/kg	81		SW846 6020	10/22-10/28/08	K05DE1CR
	1.6	11.8	11.3	mg/kg	82	0.12	SW846 6020	10/22-10/28/08	K05DE1CT
			Dilution Factor: 5						
Iron									
	47.2	59.9	112	mg/kg	108		SW846 6020	10/22-10/28/08	K05DE1CU
	47.2	59.2	105	mg/kg	98	6.5	SW846 6020	10/22-10/28/08	K05DE1CV
			Dilution Factor: 5						
Lead									
	ND	12.0	9.70 N	mg/kg	79		SW846 6020	10/22-10/28/08	K05DE1C0
	ND	11.8	9.23 N	mg/kg	76	5.0	SW846 6020	10/22-10/28/08	K05DE1C1
			Dilution Factor: 5						
Manganese									
	3.1	12.0	13.3	mg/kg	85		SW846 6020	10/22-10/28/08	K05DE1CW
	3.1	11.8	12.4 N	mg/kg	78	6.8	SW846 6020	10/22-10/28/08	K05DE1CX
			Dilution Factor: 5						
Selenium									
	0.49	12.0	9.96 N	mg/kg	79		SW846 6020	10/22-10/28/08	K05DE1C4
	0.49	11.8	9.57 N	mg/kg	77	4.0	SW846 6020	10/22-10/28/08	K05DE1C5
			Dilution Factor: 5						
Silver									
	ND	2.99	2.28 N	mg/kg	76		SW846 6020	10/22-10/28/08	K05DE1CM
	ND	2.96	2.29 N	mg/kg	77	0.34	SW846 6020	10/22-10/28/08	K05DE1CN
			Dilution Factor: 5						
Thallium									
	ND	2.99	2.51	mg/kg	84		SW846 6020	10/22-10/28/08	K05DE1C6
	ND	2.96	2.31 N	mg/kg	78	8.5	SW846 6020	10/22-10/28/08	K05DE1C7
			Dilution Factor: 5						
Vanadium									
	ND	12.0	9.45 N	mg/kg	79		SW846 6020	10/22-10/28/08	K05DE1C8
	ND	11.8	9.14 N	mg/kg	77	3.4	SW846 6020	10/22-10/28/08	K05DE1C9
			Dilution Factor: 5						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: G8J170331 **Matrix.....:** BIOLOGIC
Date Sampled...: 09/29/08 **Date Received..:** 10/03/08

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Zinc									
	7.2	12.0	17.2	mg/kg	83		SW846 6020	10/22-10/28/08	K05DE1DA
	7.2	11.8	16.8	mg/kg	81	2.2	SW846 6020	10/22-10/28/08	K05DE1DC

Dilution Factor: 5

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

BIOLOGIC, 8290, Percent Lipids

Tetra Tech Inc

Client Sample ID: MNS-03

Trace Level Organic Compounds

Lot-Sample #...: G8J170331-001 **Work Order #...:** K05DE1A2 **Matrix.....:** BIOLOGIC
Date Sampled...: 09/29/08 **Date Received..:** 10/03/08
Prep Date.....: 10/21/08 **Analysis Date..:** 10/25/08
Prep Batch #...: 8295610
Dilution Factor: 1
% Moisture.....: 40

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
Percent Lipids	**0.97**	**0.10**	**%**	**SW846 8290**

BIOLOGICAL, D 2216-90, Percent Moisture

Tetra Tech Inc

Client Sample ID: MNS-03

General Chemistry

Lot-Sample #...: G8J170331-001 **Work Order #...:** K05DE **Matrix.....:** BIOLOGIC
Date Sampled...: 09/29/08 **Date Received..:** 10/03/08
% Moisture.....: 40

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	**40.0**	**0.10**	**%**	**ASTM D 2216-90**	**10/27-10/28/08**	**8301433**

Dilution Factor: 1 MDL.....: 0.10

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

November 7, 2008

TestAmerica Project Number: G8J210326

Gary Floyd
Tetra Tech Inc
737 Bishop Street
Suite 3020
Honolulu, HI 96813

Dear Mr. Floyd,

This report contains the analytical results for the samples received under chain of custody by TestAmerica on October 21, 2008. These samples are associated with your 100-SFO-T95M78 project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4402.

Sincerely,

Jill Kellmann
Project Manager

CC: Yvonne Parry – Tetra Tech, Inc.
Susan Carstenn – Tetra Tech, Inc.

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TestAmerica West Sacramento Project Number G8J210326

Case Narrative

Quality Assurance Program

Sample Description Information

Chain of Custody Documentation

BIOLOGIC, 8260B, VOA
Sample: 1
- Sample Data Sheet
- Method Blank Report
- Laboratory QC Reports

BIOLOGIC, 8081A, Pesticides
Sample: 1
- Sample Data Sheet
- Method Blank Report
- Laboratory QC Reports

BIOLOGIC, 8270C, SVOCs
Sample: 1
- Sample Data Sheet
- Method Blank Report
- Laboratory QC Reports

BIOLOGIC, 8330, Explosives
Sample: 1
- Sample Data Sheet
- Method Blank Report
- Laboratory QC Reports

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TestAmerica West Sacramento Project Number G8J210326

BIOLOGIC, 8321A, Perchlorate
Sample: 1
- Sample Data Sheet
- Method Blank Report
- Laboratory QC Reports

BIOLOGIC, 8290, Dioxins/Furans
Sample: 1
- Sample Data Sheet
- Method Blank Report
- Laboratory QC Reports

BIOLOGIC, Metals - Various Methods
Samples: 1
- Sample Data Sheet
- Method Blank Report
- Laboratory QC Reports

BIOLOGIC, 8290, Percent Lipids
Sample: 1
- Sample Data Sheet

BIOLOGICAL, D 2216-90, Percent Moisture
Sample: 1
- Sample Data Sheet

Case Narrative

TestAmerica West Sacramento Project Number G8J210326

General comments
There was insufficient sample volume to prepare a matrix spike/matrix spike duplicate (MS/MSD) pair with all batches except metals.

BIOLOGIC, 6020 Metals
Sample: 1
This sample required a dilution due to matrix interference. Reporting limits were raised accordingly.

There are no other anomalies associated with this project.

TestAmerica Laboratories West Sacramento Certifications/Accreditations

Certifying State	Certificate #	Certifying State	Certificate #
Alaska	UST-055	New York*	11666
Arizona	AZ0616	Oregon*	CA 200005
Arkansas	04-067-0	Pennsylvania	68-1272
California*	01119CA	South Carolina	87014002
Colorado	NA	Texas	TX 270-2004A
Connecticut	PH-0691	Utah*	QUAN1
Florida*	E87570	Virginia	00178
Georgia	960	Washington	C087
Hawaii	NA	West Virginia	9930C, 334
Kansas*	E10375	Wisconsin	998204680
Louisiana*	01944	NFESC	NA
Michigan	9947	USACE	NA
Nevada	CA44	USDA Foreign Plant	37-82605
New Jersey*	CA005	USDA Foreign Soil	S-46613

*NELAP accredited. A more detailed parameter list is available upon request. Updated 9/21/07

QC Parameter Definitions

QC Batch: The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

Method Blank: An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD): An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

Duplicate Sample (DU): Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

Surrogates: Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

Matrix Spike and Matrix Spike Duplicate (MS/MSD): An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

Isotope Dilution: For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

Control Limits: The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

Sample Summary

TestAmerica West Sacramento Project Number G8J210326

WO#	Sample #	Client Sample ID	Sampling Date	Received Date
K1ACH	1	SBNS-01-A	10/1/2008 12:00 PM	10/21/2008 12:55 PM

Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

G8J210326

CHAIN-OF-CUSTODY RECORD

TETRA TECH

Client Name/Account #: TetraTech, Inc.
Address: 737 Bishop St., Suite 3020
City/State/Zip: Honolulu, HI 96813
Project Manager: Gary Floyd
Telephone Number: (808)533-3366 **Fax No.:** (808)533-3306
Sampler Name: (Print) Maren Anderson
Sampler Signature: Maren Anderson

Report To: Gary Floyd, Susan Carstenn, Yvonne Parry
Invoice To: Yvonne Parry
Project ID: Makua Shellfish Study
Project #: 100-SFO-T95M78

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Multi-incremental Sample	Preservative: Ice	Preservative: HNO_3 (Red Label)	Preservative: HCl (Blue Label)	Preservative: NaOH (Orange Label)	Preservative: H_2SO_4 Plastic (Yellow Label)	Preservative: H_2SO_4 Glass (Yellow Label)	Preservative: None (Black Label)	Preservative: Other (Specify)	Matrix: Groundwater	Matrix: Wastewater	Matrix: Drinking Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify):	Analyze For: See attached Table	Analyze For: homogenization	Analyze For: split and send to TestAmerica (½ of sample)	Analyze For: for QC purposes	Analyze For: HOLD until further notice						RUSH TAT (Pre-Schedule)	Standard TAT		
SBNS-01-A	10/1/08	1200	9		X		X						X							X	X	X	X										X	
SBNS-01-B	10/1/08	1200	5		X		X						X							X					X								X	

Special Instructions: Please remove shells from samples and homogenize soft tissue for analysis. Analyte table is attached to this COC. T-blank is enclosed in both coolers. Please hold SBNS-01-B.

Method of Shipment: FEDEX

Laboratory Comments:
Temperature Upon Receipt: 2.7°C
VOCs Free of Headspace? Y N

Relinquished by:	Date	Time	Received by:	Date	Time
Maren Anderson	10.02.08	2:30pm	Yvonne Parry Y. PARRY	10-2-08	1430
Relinquished by:	Date	Time	Received by Laboratory:	Date	Time
Yvonne Parry Y. PARRY	10-3-08	11:00	[illegible]	10/14/08	15:20
[illegible]	10-21-08	1255	[illegible]	10-21-08	1255

Page 1 of 1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

LOT RECEIPT CHECKLIST
TestAmerica West Sacramento

CLIENT Tetra Tech PM JK LOG # 54894

LOT# (QUANTIMS ID) G8J210326 QUOTE# 81182 LOCATION F-10 B

		Initials	Date
DATE RECEIVED 10-21-08 TIME RECEIVED 1255		CH	10-21-08
DELIVERED BY	☐ FEDEX ☐ CA OVERNIGHT ☑ CLIENT ☐ AIRBORNE ☐ GOLDENSTATE ☐ DHL ☐ UPS ☐ BAX GLOBAL ☐ GO-GETTERS ☐ TAL COURIER ☐ VALLEY LOGISTICS ☐ MORGAN HILL COURIER ☐ OTHER		
CUSTODY SEAL STATUS	☐ INTACT ☐ BROKEN ☑ N/A		
CUSTODY SEAL #(S)			
SHIPPPING CONTAINER(S)	☐ TAL ☑ CLIENT ☐ N/A		
TEMPERTURE RECORD (IN °C)	IR 4 ☐ 5 ☑ ☐ OTHER		
COC #(S)	N/A		
TEMPERATURE BLANK	Observed: ✓ Corrected:		
SAMPLE TEMPERATURE	Observed: -5 -6 -7 Average: -6 Corrected Average: -5		
COLLECTOR'S NAME:	☐ Verified from COC ☑ Not on COC		
pH MEASURED	☐ YES ☐ ANOMALY ☑ N/A		
LABELED BY			
LABELS CHECKED BY			
PEER REVIEW	☑ NA		
SHORT HOLD TEST NOTIFICATION	SAMPLE RECEIVING		
	WETCHEM ☑ N/A		
	VOA-ENCORES ☑ N/A		
☐ METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL	☑ N/A		
☐ COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES	☑ N/A		
☑ CLOUSEAU	☐ TEMPERATURE EXCEEDED (2 °C – 6 °C)*1 ☐ N/A		
☐ WET ICE	☐ BLUE ICE ☐ GEL PACK ☐ NO COOLING AGENTS USED ☑ PM NOTIFIED		

Notes: rec'd 2 jars labeled SBNS-01A + 1 jar not labeled lid says 84955 mo1

*1 Acceptable temperature range for State of Wisconsin samples is≤4°C.

LEAVE NO SPACES BLANK. USE "N/A" IF NOT APPLICABLE.

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TestAmerica West Sacramento

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Bottle Lot Inventory

Lot ID: G8J210326

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOA*																				
VOAh*																				
AGB																				
AGBs																				
250AGB																				
250AGBs																				
250AGBn																				
500AGB																				
____AGJ																				
500AGJ																				
250AGJ																				
125AGJ																				
____CGJ																				
500CGJ																				
250CGJ	2	1																		
125CGJ																				
PJ																				
PJn																				
500PJ																				
500PJn																				
500PJna																				
500PJzn/na																				
250PJ																				
250PJn																				
250PJna																				
250PJzn/na																				
Acetate Tube																				
_____"CT																				
Encore																				
Folder/filter																				
PUF																				
Petri/Filter																				
XAD Trap																				
Ziploc																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

h = hydrochloric acid s = sulfuric acid na = sodium hydroxide n = nitric acid zn = zinc acetate

Number of VOAs with air bubbles present / total number of VOA's

QA-185 5/05 EM

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LEAVE NO SPACES BLANK. USE "NA" IF NOT APPLICABLE.

BIOLOGIC, 8260B, VOA

Tetra Tech Inc

Client Sample ID: SBNS-01-A

GC/MS Volatiles

Lot-Sample #...: G8J210326-001 **Work Order #...:** K1ACH1A4 **Matrix.....:** BIOLOGIC
Date Sampled...: 10/01/08 **Date Received..:** 10/21/08
Prep Date.....: 10/24/08 **Analysis Date..:** 10/24/08
Prep Batch #...: 8298695
Dilution Factor: 1
% Moisture.....: 38 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzene	ND	5.0	ug/kg	0.26
Ethylbenzene	ND	5.0	ug/kg	0.34
Styrene	ND	5.0	ug/kg	0.31
Toluene	**0.89 J**	**5.0**	**ug/kg**	**0.61**
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	0.51
m-Xylene & p-Xylene	ND	10	ug/kg	0.81
o-Xylene	ND	5.0	ug/kg	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	85	(70 - 130)
1,2-Dichloroethane-d4	88	(70 - 130)
Toluene-d8	89	(70 - 130)
4-Bromofluorobenzene	75	(70 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

QC DATA ASSOCIATION SUMMARY

G8J210326

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	BIOLOGIC	SW846 8330		8297430	
	BIOLOGIC	SW846 8290		8295609	
	BIOLOGIC	SW846 6020		8296157	8296108
	BIOLOGIC	SW846 8290		8295610	
	BIOLOGIC	ASTM D 2216-90		8301433	
	BIOLOGIC	SW846 7471A		8301239	
	BIOLOGIC	SW846 8081A		8297336	
	BIOLOGIC	SW846 8260B		8298695	
	BIOLOGIC	SW846 8270C		8297344	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: G8J210326 **Work Order #...:** K1LQ11AA **Matrix.....:** BIOLOGIC
MB Lot-Sample #: G8J240000-695

Prep Date.....: 10/24/08
Analysis Date..: 10/24/08 **Prep Batch #...:** 8298695
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
o-Xylene	ND	5.0	ug/kg	SW846 8260B
m-Xylene & p-Xylene	ND	10	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	91	(70 - 130)
1,2-Dichloroethane-d4	96	(70 - 130)
Toluene-d8	98	(70 - 130)
4-Bromofluorobenzene	93	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: G8J210326 **Work Order #...:** K1LQ11AC **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J240000-695
Prep Date.....: 10/24/08 **Analysis Date..:** 10/24/08
Prep Batch #...: 8298695
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**111**	**(70 - 130)**	**SW846 8260B**
Ethylbenzene	**94**	**(70 - 130)**	**SW846 8260B**
Styrene	**104**	**(70 - 130)**	**SW846 8260B**
Toluene	**104**	**(70 - 130)**	**SW846 8260B**
1,2,4-Trimethylbenzene	**91**	**(70 - 130)**	**SW846 8260B**
m-Xylene & p-Xylene	**100**	**(70 - 130)**	**SW846 8260B**
o-Xylene	**100**	**(70 - 130)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	91	(70 - 130)
1,2-Dichloroethane-d4	94	(70 - 130)
Toluene-d8	99	(70 - 130)
4-Bromofluorobenzene	93	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: G8J210326 **Work Order #...:** K1LQ11AC **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J240000-695
Prep Date.....: 10/24/08 **Analysis Date..:** 10/24/08
Prep Batch #...: 8298695
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Benzene	**100**	**111**	**ug/kg**	**111**	**SW846 8260B**
Ethylbenzene	**100**	**93.7**	**ug/kg**	**94**	**SW846 8260B**
Styrene	**100**	**104**	**ug/kg**	**104**	**SW846 8260B**
Toluene	**100**	**104**	**ug/kg**	**104**	**SW846 8260B**
1,2,4-Trimethylbenzene	**100**	**91.1**	**ug/kg**	**91**	**SW846 8260B**
m-Xylene & p-Xylene	**200**	**200**	**ug/kg**	**100**	**SW846 8260B**
o-Xylene	**100**	**99.6**	**ug/kg**	**100**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	91	(70 - 130)
1,2-Dichloroethane-d4	94	(70 - 130)
Toluene-d8	99	(70 - 130)
4-Bromofluorobenzene	93	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

BIOLOGIC, 8081A, Pesticides

Tetra Tech Inc

Client Sample ID: SBNS-01-A

GC Semivolatiles

Lot-Sample #...: G8J210326-001 **Work Order #...:** K1ACH1AW **Matrix.....:** BIOLOGIC
Date Sampled...: 10/01/08 **Date Received..:** 10/21/08
Prep Date.....: 10/27/08 **Analysis Date..:** 11/05/08
Prep Batch #...: 8297336
Dilution Factor: 1.96
% Moisture.....: 38 **Method.....:** SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	9.8	ug/kg	0.096
Aldrin	ND	9.8	ug/kg	0.33
beta-BHC	ND	9.8	ug/kg	0.31
delta-BHC	ND	9.8	ug/kg	0.53
gamma-BHC (Lindane)	ND	9.8	ug/kg	0.17
4,4'-DDT	ND	20	ug/kg	0.27
Heptachlor	ND	9.8	ug/kg	0.49
Heptachlor epoxide	ND	9.8	ug/kg	0.096

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	87	(10 - 109)
Tetrachloro-m-xylene	85	(10 - 122)

QC DATA ASSOCIATION SUMMARY

G8J210326

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	BIOLOGIC	SW846 8330		8297430	
	BIOLOGIC	SW846 8290		8295609	
	BIOLOGIC	SW846 6020		8296157	8296108
	BIOLOGIC	SW846 8290		8295610	
	BIOLOGIC	ASTM D 2216-90		8301433	
	BIOLOGIC	SW846 7471A		8301239	
	BIOLOGIC	SW846 8081A		8297336	
	BIOLOGIC	SW846 8260B		8298695	
	BIOLOGIC	SW846 8270C		8297344	

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: G8J210326 **Work Order #...:** K1F7D1AF **Matrix.....:** BIOLOGIC
MB Lot-Sample #: G8J230000-336

Prep Date.....: 10/27/08
Analysis Date..: 11/05/08 **Prep Batch #...:** 8297336
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aldrin	ND	5.0	ug/kg	SW846 8081A
alpha-BHC	ND	5.0	ug/kg	SW846 8081A
beta-BHC	ND	5.0	ug/kg	SW846 8081A
delta-BHC	ND	5.0	ug/kg	SW846 8081A
gamma-BHC (Lindane)	ND	5.0	ug/kg	SW846 8081A
4,4'-DDT	ND	10	ug/kg	SW846 8081A
Heptachlor	ND	5.0	ug/kg	SW846 8081A
Heptachlor epoxide	ND	5.0	ug/kg	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	91	(10 - 109)
Tetrachloro-m-xylene	80	(10 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: G8J210326 **Work Order #...:** K1F7D1AG-LCS **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J230000-336 K1F7D1AH-LCSD
Prep Date.....: 10/27/08 **Analysis Date..:** 11/05/08
Prep Batch #...: 8297336
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aldrin	**93**	**(30 - 150)**			**SW846 8081A**
	101	**(30 - 150)**	**8.8**	**(0-50)**	**SW846 8081A**
alpha-BHC	**86**	**(30 - 150)**			**SW846 8081A**
	97	**(30 - 150)**	**11**	**(0-50)**	**SW846 8081A**
beta-BHC	**91**	**(30 - 150)**			**SW846 8081A**
	100	**(30 - 150)**	**8.5**	**(0-50)**	**SW846 8081A**
delta-BHC	**64**	**(30 - 150)**			**SW846 8081A**
	72	**(30 - 150)**	**12**	**(0-50)**	**SW846 8081A**
gamma-BHC (Lindane)	**91**	**(30 - 150)**			**SW846 8081A**
	101	**(30 - 150)**	**11**	**(0-50)**	**SW846 8081A**
4,4'-DDT	**104**	**(30 - 150)**			**SW846 8081A**
	115	**(30 - 150)**	**10**	**(0-50)**	**SW846 8081A**
Heptachlor	**97**	**(30 - 150)**			**SW846 8081A**
	108	**(30 - 150)**	**11**	**(0-50)**	**SW846 8081A**
Heptachlor epoxide	**93**	**(30 - 150)**			**SW846 8081A**
	102	**(30 - 150)**	**9.1**	**(0-50)**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	82	(10 - 109)
	86	(10 - 109)
Tetrachloro-m-xylene	68	(10 - 122)
	77	(10 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: G8J210326 **Work Order #...:** K1F7D1AG-LCS **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J230000-336 K1F7D1AH-LCSD
Prep Date.....: 10/27/08 **Analysis Date..:** 11/05/08
Prep Batch #...: 8297336
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Aldrin	**8.33**	**7.73**	**ug/kg**	**93**		**SW846 8081A**
	8.33	**8.44**	**ug/kg**	**101**	**8.8**	**SW846 8081A**
alpha-BHC	**8.33**	**7.20**	**ug/kg**	**86**		**SW846 8081A**
	8.33	**8.07**	**ug/kg**	**97**	**11**	**SW846 8081A**
beta-BHC	**8.33**	**7.62**	**ug/kg**	**91**		**SW846 8081A**
	8.33	**8.29**	**ug/kg**	**100**	**8.5**	**SW846 8081A**
delta-BHC	**8.33**	**5.32**	**ug/kg**	**64**		**SW846 8081A**
	8.33	**5.98**	**ug/kg**	**72**	**12**	**SW846 8081A**
gamma-BHC (Lindane)	**8.33**	**7.56**	**ug/kg**	**91**		**SW846 8081A**
	8.33	**8.43**	**ug/kg**	**101**	**11**	**SW846 8081A**
4,4'-DDT	**16.7**	**17.4**	**ug/kg**	**104**		**SW846 8081A**
	16.7	**19.3**	**ug/kg**	**115**	**10**	**SW846 8081A**
Heptachlor	**8.33**	**8.06**	**ug/kg**	**97**		**SW846 8081A**
	8.33	**9.04**	**ug/kg**	**108**	**11**	**SW846 8081A**
Heptachlor epoxide	**8.33**	**7.79**	**ug/kg**	**93**		**SW846 8081A**
	8.33	**8.53**	**ug/kg**	**102**	**9.1**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	82	(10 - 109)
	86	(10 - 109)
Tetrachloro-m-xylene	68	(10 - 122)
	77	(10 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

BIOLOGIC, 8270C, SVOCs

Tetra Tech Inc

Client Sample ID: SBNS-01-A

GC/MS Semivolatiles

Lot-Sample #...: G8J210326-001 **Work Order #...:** K1ACH1A0 **Matrix.....:** BIOLOGIC
Date Sampled...: 10/01/08 **Date Received..:** 10/21/08
Prep Date.....: 10/27/08 **Analysis Date..:** 10/31/08
Prep Batch #...: 8297344
Dilution Factor: 1
% Moisture.....: 38 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Di-n-butyl phthalate	ND	2000	ug/kg	990
bis(2-Ethylhexyl) phthalate	ND	2000	ug/kg	990
Diethyl phthalate	ND	2000	ug/kg	990
Di-n-octyl phthalate	ND	2000	ug/kg	990
Pentachlorophenol	ND	9600	ug/kg	4800
Pyrene	ND	2000	ug/kg	990

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	72	(20 - 130)
1,2-Dichlorobenzene-d4	69	(20 - 130)
2-Fluorobiphenyl	77	(50 - 150)
2-Fluorophenol	76	(50 - 150)
Nitrobenzene-d5	76	(50 - 150)
Phenol-d5	75	(50 - 150)
Terphenyl-d14	80	(50 - 150)
2,4,6-Tribromophenol	98	(50 - 150)

QC DATA ASSOCIATION SUMMARY

G8J210326

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	BIOLOGIC	SW846 8330		8297430	
	BIOLOGIC	SW846 8290		8295609	
	BIOLOGIC	SW846 6020		8296157	8296108
	BIOLOGIC	SW846 8290		8295610	
	BIOLOGIC	ASTM D 2216-90		8301433	
	BIOLOGIC	SW846 7471A		8301239	
	BIOLOGIC	SW846 8081A		8297336	
	BIOLOGIC	SW846 8260B		8298695	
	BIOLOGIC	SW846 8270C		8297344	

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: G8J210326 **Work Order #...:** K1F781AA **Matrix.....:** BIOLOGIC
MB Lot-Sample #: G8J230000-344

Prep Date.....: 10/27/08
Analysis Date..: 10/31/08 **Prep Batch #...:** 8297344
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
bis(2-Ethylhexyl) phthalate	ND	2000	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	2000	ug/kg	SW846 8270C
Diethyl phthalate	ND	2000	ug/kg	SW846 8270C
Di-n-octyl phthalate	ND	2000	ug/kg	SW846 8270C
Pentachlorophenol	ND	9600	ug/kg	SW846 8270C
Pyrene	ND	2000	ug/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	62	(20 - 130)
1,2-Dichlorobenzene-d4	69	(20 - 130)
2-Fluorobiphenyl	67	(50 - 150)
2-Fluorophenol	68	(50 - 150)
Nitrobenzene-d5	67	(50 - 150)
Phenol-d5	67	(50 - 150)
Terphenyl-d14	98	(50 - 150)
2,4,6-Tribromophenol	67	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: G8J210326 **Work Order #...:** K1F781AE-LCS **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J230000-344 K1F781AF-LCSD
Prep Date.....: 10/27/08 **Analysis Date..:** 10/31/08
Prep Batch #...: 8297344
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Pentachlorophenol	**75**	**(50 - 150)**			**SW846 8270C**
	80	**(50 - 150)**	**5.3**	**(0-50)**	**SW846 8270C**
Pyrene	**86**	**(50 - 150)**			**SW846 8270C**
	81	**(50 - 150)**	**6.0**	**(0-50)**	**SW846 8270C**
bis(2-Ethylhexyl) phthalate	**80**	**(50 - 150)**			**SW846 8270C**
	84	**(50 - 150)**	**4.6**	**(0-50)**	**SW846 8270C**
Diethyl phthalate	**79**	**(50 - 150)**			**SW846 8270C**
	86	**(50 - 150)**	**8.3**	**(0-50)**	**SW846 8270C**
Di-n-butyl phthalate	**80**	**(50 - 150)**			**SW846 8270C**
	84	**(50 - 150)**	**4.3**	**(0-50)**	**SW846 8270C**
Di-n-octyl phthalate	**76**	**(50 - 150)**			**SW846 8270C**
	82	**(50 - 150)**	**7.8**	**(0-50)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	78	(20 - 130)
	75	(20 - 130)
1,2-Dichlorobenzene-d4	74	(20 - 130)
	75	(20 - 130)
2-Fluorobiphenyl	73	(50 - 150)
	77	(50 - 150)
2-Fluorophenol	78	(50 - 150)
	78	(50 - 150)
Nitrobenzene-d5	71	(50 - 150)
	74	(50 - 150)
Phenol-d5	83	(50 - 150)
	76	(50 - 150)
Terphenyl-d14	86	(50 - 150)
	84	(50 - 150)
2,4,6-Tribromophenol	82	(50 - 150)
	93	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: G8J210326 **Work Order #...:** K1F781AE-LCS **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J230000-344 K1F781AF-LCSD
Prep Date.....: 10/27/08 **Analysis Date..:** 10/31/08
Prep Batch #...: 8297344
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Pentachlorophenol	**3330**	**2510**	**ug/kg**	**75**		**SW846 8270C**
	3330	**2650**	**ug/kg**	**80**	**5.3**	**SW846 8270C**
Pyrene	**3330**	**2850**	**ug/kg**	**86**		**SW846 8270C**
	3330	**2680**	**ug/kg**	**81**	**6.0**	**SW846 8270C**
bis(2-Ethylhexyl) phthalate	**3330**	**2680**	**ug/kg**	**80**		**SW846 8270C**
	3330	**2800**	**ug/kg**	**84**	**4.6**	**SW846 8270C**
Diethyl phthalate	**3330**	**2630**	**ug/kg**	**79**		**SW846 8270C**
	3330	**2860**	**ug/kg**	**86**	**8.3**	**SW846 8270C**
Di-n-butyl phthalate	**3330**	**2680**	**ug/kg**	**80**		**SW846 8270C**
	3330	**2800**	**ug/kg**	**84**	**4.3**	**SW846 8270C**
Di-n-octyl phthalate	**3330**	**2530**	**ug/kg**	**76**		**SW846 8270C**
	3330	**2730**	**ug/kg**	**82**	**7.8**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	78	(20 - 130)
	75	(20 - 130)
1,2-Dichlorobenzene-d4	74	(20 - 130)
	75	(20 - 130)
2-Fluorobiphenyl	73	(50 - 150)
	77	(50 - 150)
2-Fluorophenol	78	(50 - 150)
	78	(50 - 150)
Nitrobenzene-d5	71	(50 - 150)
	74	(50 - 150)
Phenol-d5	83	(50 - 150)
	76	(50 - 150)
Terphenyl-d14	86	(50 - 150)
	84	(50 - 150)
2,4,6-Tribromophenol	82	(50 - 150)
	93	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

BIOLOGIC, 8330, Explosives

Tetra Tech Inc

Client Sample ID: SBNS-01-A

HPLC

Lot-Sample #...: G8J210326-001 **Work Order #...:** K1ACH1AX **Matrix.....:** BIOLOGIC
Date Sampled...: 10/01/08 **Date Received..:** 10/21/08
Prep Date.....: 10/23/08 **Analysis Date..:** 11/04/08
Prep Batch #...: 8297430
Dilution Factor: 1
% Moisture.....: 38 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroglycerin	ND	0.50	mg/kg	0.070
2,4-Dinitrotoluene	ND	0.25	mg/kg	0.028
RDX	ND	0.25	mg/kg	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	90	(74 - 117)

QC DATA ASSOCIATION SUMMARY

G8J210326

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	BIOLOGIC	SW846 8330		8297430	
	BIOLOGIC	SW846 8290		8295609	
	BIOLOGIC	SW846 6020		8296157	8296108
	BIOLOGIC	SW846 8290		8295610	
	BIOLOGIC	ASTM D 2216-90		8301433	
	BIOLOGIC	SW846 7471A		8301239	
	BIOLOGIC	SW846 8081A		8297336	
	BIOLOGIC	SW846 8260B		8298695	
	BIOLOGIC	SW846 8270C		8297344	

METHOD BLANK REPORT

HPLC

Client Lot #...: G8J210326 **Work Order #...:** K1GX61AA **Matrix.....:** BIOLOGIC
MB Lot-Sample #: G8J230000-430

Prep Date.....: 10/23/08
Analysis Date..: 11/04/08 **Prep Batch #...:** 8297430
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dinitrotoluene	ND	0.25	mg/kg	SW846 8330
Nitroglycerin	ND	0.50	mg/kg	SW846 8330
RDX	ND	0.25	mg/kg	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(74 - 117)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G8J210326 **Work Order #...:** K1GX61AC-LCS **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J230000-430 K1GX61AD-LCSD
Prep Date.....: 10/23/08 **Analysis Date..:** 11/04/08
Prep Batch #...: 8297430
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2,4-Dinitrotoluene	**102**	**(25 - 150)**			**SW846 8330**
	103	**(25 - 150)**	**1.6**	**(0-35)**	**SW846 8330**
Nitroglycerin	**103**	**(25 - 150)**			**SW846 8330**
	97	**(25 - 150)**	**5.8**	**(0-35)**	**SW846 8330**
RDX	**103**	**(25 - 150)**			**SW846 8330**
	107	**(25 - 150)**	**4.0**	**(0-35)**	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(74 - 117)
	95	(74 - 117)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G8J210326 **Work Order #...:** K1GX61AC-LCS **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J230000-430 K1GX61AD-LCSD
Prep Date.....: 10/23/08 **Analysis Date..:** 11/04/08
Prep Batch #...: 8297430
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
2,4-Dinitrotoluene	**1.00**	**1.02**	**mg/kg**	**102**		**SW846 8330**
	1.00	**1.03**	**mg/kg**	**103**	**1.6**	**SW846 8330**
Nitroglycerin	**5.00**	**5.14**	**mg/kg**	**103**		**SW846 8330**
	5.00	**4.85**	**mg/kg**	**97**	**5.8**	**SW846 8330**
RDX	**1.00**	**1.03**	**mg/kg**	**103**		**SW846 8330**
	1.00	**1.07**	**mg/kg**	**107**	**4.0**	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(74 - 117)
	95	(74 - 117)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

BIOLOGIC, 8321A, Perchlorate

Tetra Tech Inc

Client Sample ID: SBNS-01-A

HPLC

Lot-Sample #...: G8J210326-001 **Work Order #...:** K1ACH1A8 **Matrix.....:** BIOLOGIC
Date Sampled...: 10/01/08 **Date Received..:** 10/21/08
Prep Date.....: 11/11/08 **Analysis Date..:** 11/13/08
Prep Batch #...: 8316300
Dilution Factor: 1
% Moisture.....: 38 **Method.....:** SW846 8321A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	30	ug/kg	15

QC DATA ASSOCIATION SUMMARY

G8J210326

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	BIOLOGIC	SW846 8330		8297430	
	BIOLOGIC	SW846 8290		8295609	
	BIOLOGIC	SW846 8321A		8316300	
	BIOLOGIC	SW846 6020		8296157	8296108
	BIOLOGIC	SW846 8290		8295610	
	BIOLOGIC	ASTM D 2216-90		8301433	
	BIOLOGIC	SW846 7471A		8301239	
	BIOLOGIC	SW846 8081A		8297336	
	BIOLOGIC	SW846 8260B		8298695	
	BIOLOGIC	SW846 8270C		8297344	

METHOD BLANK REPORT

HPLC

Client Lot #...: G8J210326 **Work Order #...:** K2NGK1AA **Matrix.....:** BIOLOGIC
MB Lot-Sample #: G8K110000-300
Prep Date.....: 11/11/08
Analysis Date..: 11/13/08 **Prep Batch #...:** 8316300
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Perchlorate	ND	30	ug/kg	SW846 8321A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G8J210326 Work Order #...: K2NGK1AC-LCS Matrix.....: BIOLOGIC
LCS Lot-Sample#: G8K110000-300 K2NGK1AD-LCSD
Prep Date.....: 11/11/08 Analysis Date..: 11/13/08
Prep Batch #...: 8316300
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Perchlorate	10.0		ug/kg	96		SW846 8321A
	10.0		ug/kg	98	2.3	SW846 8321A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G8J210326 **Work Order #...:** K2NGK1AC-LCS **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8K110000-300 K2NGK1AD-LCSD
Prep Date.....: 11/11/08 **Analysis Date..:** 11/13/08
Prep Batch #...: 8316300
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	96	(70 - 130)			SW846 8321A
	98	(70 - 130)	2.3	(0-30)	SW846 8321A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

BIOLOGIC, 8290, Dioxins/Furans

Tetra Tech Inc

Client Sample ID: SBNS-01-A

Trace Level Organic Compounds

Lot-Sample #...: G8J210326-001 **Work Order #...:** K1ACH1A1 **Matrix.....:** BIOLOGIC
Date Sampled...: 10/01/08 **Date Received..:** 10/21/08
Prep Date.....: 10/21/08 **Analysis Date..:** 10/26/08
Prep Batch #...: 8295609
Dilution Factor: 1
% Moisture.....: 38

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	0.76	pg/g	SW846 8290
Total TCDD	ND	0.76	pg/g	SW846 8290
1,2,3,7,8-PeCDD	ND	1.4	pg/g	SW846 8290
Total PeCDD	ND	1.4	pg/g	SW846 8290
1,2,3,4,7,8-HxCDD	ND	0.97	pg/g	SW846 8290
1,2,3,6,7,8-HxCDD	ND	2.4	pg/g	SW846 8290
1,2,3,7,8,9-HxCDD	ND	1.4	pg/g	SW846 8290
Total HxCDD	**8.1**		**pg/g**	**SW846 8290**
1,2,3,4,6,7,8-HpCDD	**74**		**pg/g**	**SW846 8290**
Total HpCDD	**110**		**pg/g**	**SW846 8290**
OCDD	**290**		**pg/g**	**SW846 8290**
2,3,7,8-TCDF	ND	0.57	pg/g	SW846 8290
Total TCDF	ND	0.57	pg/g	SW846 8290
1,2,3,7,8-PeCDF	ND	0.83	pg/g	SW846 8290
2,3,4,7,8-PeCDF	ND	0.86	pg/g	SW846 8290
Total PeCDF	ND	1.0	pg/g	SW846 8290
1,2,3,4,7,8-HxCDF	ND	0.59	pg/g	SW846 8290
1,2,3,6,7,8-HxCDF	ND	0.58	pg/g	SW846 8290
2,3,4,6,7,8-HxCDF	ND	0.59	pg/g	SW846 8290
1,2,3,7,8,9-HxCDF	ND	0.67	pg/g	SW846 8290
Total HxCDF	ND	0.67	pg/g	SW846 8290
1,2,3,4,6,7,8-HpCDF	ND	0.59	pg/g	SW846 8290
1,2,3,4,7,8,9-HpCDF	ND	0.74	pg/g	SW846 8290
Total HpCDF	ND	0.74	pg/g	SW846 8290
OCDF	ND	0.98	pg/g	SW846 8290

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	63	(40 - 135)
13C-1,2,3,7,8-PeCDD	63	(40 - 135)
13C-1,2,3,6,7,8-HxCDD	51	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDD	59	(40 - 135)
13C-OCDD	71	(40 - 135)
13C-2,3,7,8-TCDF	56	(40 - 135)
13C-1,2,3,7,8-PeCDF	63	(40 - 135)
13C-1,2,3,4,7,8-HxCDF	55	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDF	53	(40 - 135)

QC DATA ASSOCIATION SUMMARY

G8J210326

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	BIOLOGIC	SW846 8330		8297430	
	BIOLOGIC	SW846 8290		8295609	
	BIOLOGIC	SW846 6020		8296157	8296108
	BIOLOGIC	SW846 8290		8295610	
	BIOLOGIC	ASTM D 2216-90		8301433	
	BIOLOGIC	SW846 7471A		8301239	
	BIOLOGIC	SW846 8081A		8297336	
	BIOLOGIC	SW846 8260B		8298695	
	BIOLOGIC	SW846 8270C		8297344	

METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: G8J210326 **Work Order #...:** K1AV41AA **Matrix.....:** BIOLOGIC
MB Lot-Sample #: G8J210000-609

Prep Date.....: 10/21/08
Analysis Date..: 10/25/08 **Prep Batch #...:** 8295609
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	0.60	pg/g	SW846 8290
Total TCDD	ND	0.60	pg/g	SW846 8290
1,2,3,7,8-PeCDD	ND	1.1	pg/g	SW846 8290
Total PeCDD	ND	1.1	pg/g	SW846 8290
1,2,3,4,7,8-HxCDD	ND	0.66	pg/g	SW846 8290
1,2,3,6,7,8-HxCDD	ND	0.65	pg/g	SW846 8290
1,2,3,7,8,9-HxCDD	ND	0.62	pg/g	SW846 8290
Total HxCDD	ND	0.66	pg/g	SW846 8290
1,2,3,4,6,7,8-HpCDD	ND	0.78	pg/g	SW846 8290
Total HpCDD	ND	0.78	pg/g	SW846 8290
OCDD	ND	1.1	pg/g	SW846 8290
2,3,7,8-TCDF	ND	0.53	pg/g	SW846 8290
Total TCDF	ND	0.53	pg/g	SW846 8290
1,2,3,7,8-PeCDF	ND	0.70	pg/g	SW846 8290
2,3,4,7,8-PeCDF	ND	0.72	pg/g	SW846 8290
Total PeCDF	ND	0.72	pg/g	SW846 8290
1,2,3,4,7,8-HxCDF	ND	0.41	pg/g	SW846 8290
1,2,3,6,7,8-HxCDF	ND	0.41	pg/g	SW846 8290
2,3,4,6,7,8-HxCDF	ND	0.41	pg/g	SW846 8290
1,2,3,7,8,9-HxCDF	ND	0.47	pg/g	SW846 8290
Total HxCDF	ND	0.47	pg/g	SW846 8290
1,2,3,4,6,7,8-HpCDF	ND	0.42	pg/g	SW846 8290
1,2,3,4,7,8,9-HpCDF	ND	0.53	pg/g	SW846 8290
Total HpCDF	ND	0.53	pg/g	SW846 8290
OCDF	ND	0.97	pg/g	SW846 8290

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	86	(40 - 135)
13C-1,2,3,7,8-PeCDD	92	(40 - 135)
13C-1,2,3,6,7,8-HxCDD	89	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDD	90	(40 - 135)
13C-OCDD	94	(40 - 135)
13C-2,3,7,8-TCDF	83	(40 - 135)
13C-1,2,3,7,8-PeCDF	92	(40 - 135)
13C-1,2,3,4,7,8-HxCDF	90	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDF	88	(40 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Trace Level Organic Compounds

Client Lot #...: G8J210326 **Work Order #...:** K1AV41AC **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J210000-609
Prep Date.....: 10/21/08 **Analysis Date..:** 10/25/08
Prep Batch #...: 8295609
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,3,7,8-TCDD	**90**	**(50 - 150)**	**SW846 8290**
1,2,3,7,8-PeCDD	**97**	**(50 - 150)**	**SW846 8290**
1,2,3,4,7,8-HxCDD	**101**	**(50 - 150)**	**SW846 8290**
1,2,3,6,7,8-HxCDD	**95**	**(50 - 150)**	**SW846 8290**
1,2,3,7,8,9-HxCDD	**103**	**(50 - 150)**	**SW846 8290**
1,2,3,4,6,7,8-HpCDD	**93**	**(50 - 150)**	**SW846 8290**
OCDD	**94**	**(50 - 150)**	**SW846 8290**
2,3,7,8-TCDF	**90**	**(50 - 150)**	**SW846 8290**
1,2,3,7,8-PeCDF	**92**	**(50 - 150)**	**SW846 8290**
2,3,4,7,8-PeCDF	**93**	**(50 - 150)**	**SW846 8290**
1,2,3,4,7,8-HxCDF	**88**	**(50 - 150)**	**SW846 8290**
1,2,3,6,7,8-HxCDF	**92**	**(50 - 150)**	**SW846 8290**
2,3,4,6,7,8-HxCDF	**90**	**(50 - 150)**	**SW846 8290**
1,2,3,7,8,9-HxCDF	**99**	**(50 - 150)**	**SW846 8290**
1,2,3,4,6,7,8-HpCDF	**94**	**(50 - 150)**	**SW846 8290**
1,2,3,4,7,8,9-HpCDF	**101**	**(50 - 150)**	**SW846 8290**
OCDF	**91**	**(50 - 150)**	**SW846 8290**

INTERNAL STANDARD	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	86	(40 - 135)
13C-1,2,3,7,8-PeCDD	96	(40 - 135)
13C-1,2,3,6,7,8-HxCDD	84	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDD	97	(40 - 135)
13C-OCDD	105	(40 - 135)
13C-2,3,7,8-TCDF	81	(40 - 135)
13C-1,2,3,7,8-PeCDF	93	(40 - 135)
13C-1,2,3,4,7,8-HxCDF	90	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDF	84	(40 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

Trace Level Organic Compounds

Client Lot #...: G8J210326 **Work Order #...:** K1AV41AC **Matrix.....:** BIOLOGIC
LCS Lot-Sample#: G8J210000-609
Prep Date.....: 10/21/08 **Analysis Date..:** 10/25/08
Prep Batch #...: 8295609
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
2,3,7,8-TCDD	**20.0**	**18.1**	**pg/g**	**90**	**SW846 8290**
1,2,3,7,8-PeCDD	**100**	**97.2**	**pg/g**	**97**	**SW846 8290**
1,2,3,4,7,8-HxCDD	**100**	**101**	**pg/g**	**101**	**SW846 8290**
1,2,3,6,7,8-HxCDD	**100**	**95.3**	**pg/g**	**95**	**SW846 8290**
1,2,3,7,8,9-HxCDD	**100**	**103**	**pg/g**	**103**	**SW846 8290**
1,2,3,4,6,7,8-HpCDD	**100**	**93.3**	**pg/g**	**93**	**SW846 8290**
OCDD	**200**	**189**	**pg/g**	**94**	**SW846 8290**
2,3,7,8-TCDF	**20.0**	**17.9**	**pg/g**	**90**	**SW846 8290**
1,2,3,7,8-PeCDF	**100**	**92.3**	**pg/g**	**92**	**SW846 8290**
2,3,4,7,8-PeCDF	**100**	**93.0**	**pg/g**	**93**	**SW846 8290**
1,2,3,4,7,8-HxCDF	**100**	**87.8**	**pg/g**	**88**	**SW846 8290**
1,2,3,6,7,8-HxCDF	**100**	**92.0**	**pg/g**	**92**	**SW846 8290**
2,3,4,6,7,8-HxCDF	**100**	**89.8**	**pg/g**	**90**	**SW846 8290**
1,2,3,7,8,9-HxCDF	**100**	**99.0**	**pg/g**	**99**	**SW846 8290**
1,2,3,4,6,7,8-HpCDF	**100**	**93.6**	**pg/g**	**94**	**SW846 8290**
1,2,3,4,7,8,9-HpCDF	**100**	**101**	**pg/g**	**101**	**SW846 8290**
OCDF	**200**	**181**	**pg/g**	**91**	**SW846 8290**

INTERNAL STANDARD	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	86	(40 - 135)
13C-1,2,3,7,8-PeCDD	96	(40 - 135)
13C-1,2,3,6,7,8-HxCDD	84	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDD	97	(40 - 135)
13C-OCDD	105	(40 - 135)
13C-2,3,7,8-TCDF	81	(40 - 135)
13C-1,2,3,7,8-PeCDF	93	(40 - 135)
13C-1,2,3,4,7,8-HxCDF	90	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDF	84	(40 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

BIOLOGIC
Metals - Various Methods

Tetra Tech Inc

Client Sample ID: SBNS-01-A

TOTAL Metals

Lot-Sample #...: G8J210326-001 **Matrix.....:** BIOLOGIC
Date Sampled...: 10/01/08 **Date Received..:** 10/21/08
% Moisture.....: 38

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8296157						
Silver	ND	0.50	mg/kg	SW846 6020	10/22-10/28/08	K1ACH1AH
		Dilution Factor: 5		MDL.....: 0.050		
Aluminum	**39.4 B**	**50.0**	**mg/kg**	**SW846 6020**	**10/22-10/29/08**	**K1ACH1AA**
		Dilution Factor: 10		MDL.....: 1.6		
Arsenic	ND	1.0	mg/kg	SW846 6020	10/22-10/28/08	K1ACH1AC
		Dilution Factor: 5		MDL.....: 0.40		
Barium	**1.3**	**0.50**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1ACH1AD**
		Dilution Factor: 5		MDL.....: 0.20		
Beryllium	**0.062 B**	**0.50**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1ACH1AE**
		Dilution Factor: 5		MDL.....: 0.050		
Cadmium	ND	0.50	mg/kg	SW846 6020	10/22-10/28/08	K1ACH1AF
		Dilution Factor: 5		MDL.....: 0.25		
Cobalt	**0.45 B**	**0.50**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1ACH1AG**
		Dilution Factor: 5		MDL.....: 0.050		
Chromium	**1.1 J**	**1.0**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1ACH1AJ**
		Dilution Factor: 5		MDL.....: 0.24		
Copper	**1.1 J**	**1.0**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1ACH1AK**
		Dilution Factor: 5		MDL.....: 0.055		
Iron	**50.8 J**	**25.0**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1ACH1AL**
		Dilution Factor: 5		MDL.....: 5.5		
Manganese	**1.8**	**0.50**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1ACH1AM**
		Dilution Factor: 5		MDL.....: 0.050		
Lead	**0.98**	**0.50**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1ACH1AN**
		Dilution Factor: 5		MDL.....: 0.25		
Antimony	ND	1.0	mg/kg	SW846 6020	10/22-10/28/08	K1ACH1AP
		Dilution Factor: 5		MDL.....: 0.050		
Selenium	**0.52 B,J**	**1.0**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1ACH1AQ**
		Dilution Factor: 5		MDL.....: 0.12		

(Continued on next page)

Tetra Tech Inc

Client Sample ID: SBNS-01-A

TOTAL Metals

Lot-Sample #...: G8J210326-001 **Matrix.....:** BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.50	mg/kg	SW846 6020	10/22-10/28/08	K1ACH1AR
		Dilution Factor: 5		MDL.....: 0.18		
Vanadium	ND	5.0	mg/kg	SW846 6020	10/22-10/28/08	K1ACH1AT
		Dilution Factor: 5		MDL.....: 2.2		
Zinc	**5.9 J**	**2.5**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1ACH1AU**
		Dilution Factor: 5		MDL.....: 1.2		

Prep Batch #...: 8301239

Mercury	ND	0.040	mg/kg	SW846 7471A	10/27-10/28/08	K1ACH1AV
		Dilution Factor: 1		MDL.....: 0.020		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

QC DATA ASSOCIATION SUMMARY

G8J210326

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	BIOLOGIC	SW846 6020		8296157	8296108
	BIOLOGIC	SW846 7471A		8301239	

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: G8J210326 **Matrix.....:** BIOLOGIC

MB Lot-Sample #: G8J220000-157 **Prep Batch #...:** 8296157

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Aluminum	ND	5.0	mg/kg	SW846 6020	10/22-10/29/08	K1CCL1AA
		Dilution Factor: 1				
Antimony	ND	0.20	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AP
		Dilution Factor: 1				
Arsenic	ND	0.20	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AC
		Dilution Factor: 1				
Barium	ND	0.10	mg/kg	SW846 6020	10/22-11/04/08	K1CCL1AD
		Dilution Factor: 1				
Beryllium	ND	0.10	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AE
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AF
		Dilution Factor: 1				
Chromium	**0.19 B**	**0.20**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1CCL1AJ**
		Dilution Factor: 1				
Cobalt	ND	0.10	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AG
		Dilution Factor: 1				
Copper	**0.18 B**	**0.20**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1CCL1AK**
		Dilution Factor: 1				
Iron	**3.8 B**	**5.0**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1CCL1AL**
		Dilution Factor: 1				
Lead	ND	0.10	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AN
		Dilution Factor: 1				
Manganese	ND	0.10	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AM
		Dilution Factor: 1				
Selenium	**0.060 B**	**0.20**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1CCL1AQ**
		Dilution Factor: 1				
Silver	**0.024 B**	**0.10**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1CCL1AH**
		Dilution Factor: 1				
Thallium	ND	0.10	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AR
		Dilution Factor: 1				

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: G8J210326 **Matrix.....:** BIOLOGIC

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	ND	1.0	mg/kg	SW846 6020	10/22-10/28/08	K1CCL1AT
		Dilution Factor: 1				
Zinc	**0.38 B**	**0.50**	**mg/kg**	**SW846 6020**	**10/22-10/28/08**	**K1CCL1AU**
		Dilution Factor: 1				

MB Lot-Sample #: G8J270000-239 **Prep Batch #...:** 8301239

Mercury	ND	0.040	mg/kg	SW846 7471A	10/27-10/28/08	K1NL61AA
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: G8J210326 **Matrix.....:** BIOLOGIC

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: G8J220000-157 **Prep Batch #...:** 8296157					
Aluminum	106	(80 - 120)	SW846 6020	10/22-10/29/08	K1CCL1AV
		Dilution Factor: 1			
Arsenic	94	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1AW
		Dilution Factor: 1			
Barium	95	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1AX
		Dilution Factor: 1			
Beryllium	99	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1A0
		Dilution Factor: 1			
Cadmium	96	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1A1
		Dilution Factor: 1			
Cobalt	101	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1A2
		Dilution Factor: 1			
Silver	94	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1A3
		Dilution Factor: 1			
Chromium	105	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1A4
		Dilution Factor: 1			
Copper	104	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1A5
		Dilution Factor: 1			
Iron	113	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1A6
		Dilution Factor: 1			
Manganese	104	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1A7
		Dilution Factor: 1			
Lead	96	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1A8
		Dilution Factor: 1			
Antimony	96	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1A9
		Dilution Factor: 1			
Selenium	97	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1CA
		Dilution Factor: 1			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: G8J210326 **Matrix.....:** BIOLOGIC

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	97	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1CC
		Dilution Factor: 1			
Vanadium	89	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1CD
		Dilution Factor: 1			
Zinc	104	(80 - 120)	SW846 6020	10/22-10/28/08	K1CCL1CE
		Dilution Factor: 1			
LCS Lot-Sample#: G8J270000-239 **Prep Batch #...:** 8301239					
Mercury	107	(80 - 120)	SW846 7471A	10/27-10/28/08	K1NL61AC
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: G8J210326 **Matrix.....:** BIOLOGIC

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: G8J220000-157 **Prep Batch #...:** 8296157							
Aluminum	100	106	mg/kg	106	SW846 6020	10/22-10/29/08	K1CCL1AV
			Dilution Factor: 1				
Arsenic	20.0	18.9	mg/kg	94	SW846 6020	10/22-10/28/08	K1CCL1AW
			Dilution Factor: 1				
Barium	20.0	19.0	mg/kg	95	SW846 6020	10/22-10/28/08	K1CCL1AX
			Dilution Factor: 1				
Beryllium	20.0	19.7	mg/kg	99	SW846 6020	10/22-10/28/08	K1CCL1A0
			Dilution Factor: 1				
Cadmium	20.0	19.2	mg/kg	96	SW846 6020	10/22-10/28/08	K1CCL1A1
			Dilution Factor: 1				
Cobalt	20.0	20.2	mg/kg	101	SW846 6020	10/22-10/28/08	K1CCL1A2
			Dilution Factor: 1				
Silver	5.00	4.72	mg/kg	94	SW846 6020	10/22-10/28/08	K1CCL1A3
			Dilution Factor: 1				
Chromium	20.0	21.1	mg/kg	105	SW846 6020	10/22-10/28/08	K1CCL1A4
			Dilution Factor: 1				
Copper	20.0	20.8	mg/kg	104	SW846 6020	10/22-10/28/08	K1CCL1A5
			Dilution Factor: 1				
Iron	100	113	mg/kg	113	SW846 6020	10/22-10/28/08	K1CCL1A6
			Dilution Factor: 1				
Manganese	20.0	20.7	mg/kg	104	SW846 6020	10/22-10/28/08	K1CCL1A7
			Dilution Factor: 1				
Lead	20.0	19.1	mg/kg	96	SW846 6020	10/22-10/28/08	K1CCL1A8
			Dilution Factor: 1				
Antimony	5.00	4.79	mg/kg	96	SW846 6020	10/22-10/28/08	K1CCL1A9
			Dilution Factor: 1				
Selenium	20.0	19.3	mg/kg	97	SW846 6020	10/22-10/28/08	K1CCL1CA
			Dilution Factor: 1				

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: G8J210326 **Matrix.....:** BIOLOGIC

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	5.00	4.84	mg/kg	97	SW846 6020	10/22-10/28/08	K1CCL1CC
			Dilution Factor: 1				
Vanadium	20.0	17.8	mg/kg	89	SW846 6020	10/22-10/28/08	K1CCL1CD
			Dilution Factor: 1				
Zinc	20.0	20.8	mg/kg	104	SW846 6020	10/22-10/28/08	K1CCL1CE
			Dilution Factor: 1				

LCS Lot-Sample#: G8J270000-239 **Prep Batch #...:** 8301239

Mercury	0.0830	0.0892	mg/kg	107	SW846 7471A	10/27-10/28/08	K1NL61AC
			Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: G8J210326 **Matrix.....:** BIOLOGIC
Date Sampled...: 09/29/08 **Date Received..:** 10/03/08

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: G8J170331-001 **Prep Batch #...:** 8296157							
						% Moisture.....: 40	
Aluminum	92	(80 - 120)			SW846 6020	10/22-10/29/08	K05DE1A8
	113	(80 - 120)	9.0	(0-35)	SW846 6020	10/22-10/29/08	K05DE1A9
		Dilution Factor: 10					
Antimony	81	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1C2
	80	(80 - 120)	2.4	(0-35)	SW846 6020	10/22-10/28/08	K05DE1C3
		Dilution Factor: 5					
Arsenic	83	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CA
	80	(80 - 120)	4.6	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CC
		Dilution Factor: 5					
Barium	83	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CD
	78 N	(80 - 120)	6.1	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CE
		Dilution Factor: 5					
Beryllium	80	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CF
	80	(80 - 120)	2.2	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CG
		Dilution Factor: 5					
Cadmium	83	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CH
	81	(80 - 120)	3.5	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CJ
		Dilution Factor: 5					
Chromium	84	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CP
	85	(80 - 120)	0.49	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CQ
		Dilution Factor: 5					
Cobalt	82	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CK
	81	(80 - 120)	1.7	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CL
		Dilution Factor: 5					
Copper	81	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CR
	82	(80 - 120)	0.12	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CT
		Dilution Factor: 5					
Iron	108	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CU
	98	(80 - 120)	6.5	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CV
		Dilution Factor: 5					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: G8J210326 **Matrix.....:** BIOLOGIC
Date Sampled...: 09/29/08 **Date Received..:** 10/03/08

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	79 N	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1C0
	76 N	(80 - 120)	5.0	(0-35)	SW846 6020	10/22-10/28/08	K05DE1C1
		Dilution Factor: 5					
Manganese	85	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CW
	78 N	(80 - 120)	6.8	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CX
		Dilution Factor: 5					
Selenium	79 N	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1C4
	77 N	(80 - 120)	4.0	(0-35)	SW846 6020	10/22-10/28/08	K05DE1C5
		Dilution Factor: 5					
Silver	76 N	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1CM
	77 N	(80 - 120)	0.34	(0-35)	SW846 6020	10/22-10/28/08	K05DE1CN
		Dilution Factor: 5					
Thallium	84	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1C6
	78 N	(80 - 120)	8.5	(0-35)	SW846 6020	10/22-10/28/08	K05DE1C7
		Dilution Factor: 5					
Vanadium	79 N	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1C8
	77 N	(80 - 120)	3.4	(0-35)	SW846 6020	10/22-10/28/08	K05DE1C9
		Dilution Factor: 5					
Zinc	83	(80 - 120)			SW846 6020	10/22-10/28/08	K05DE1DA
	81	(80 - 120)	2.2	(0-35)	SW846 6020	10/22-10/28/08	K05DE1DC
		Dilution Factor: 5					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: G8J210326 **Matrix.....:** BIOLOGIC
Date Sampled...: 09/29/08 **Date Received..:** 10/03/08

MS Lot-Sample #: G8J170331-001 **Prep Batch #...:** 8296157
% Moisture.....: 40

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Aluminum									
	72.4	59.9	128	mg/kg	92		SW846 6020	10/22-10/29/08	K05DE1A8
	72.4	59.2	139	mg/kg	113	9.0	SW846 6020	10/22-10/29/08	K05DE1A9
			Dilution Factor: 10						
Antimony									
	ND	2.99	2.42	mg/kg	81		SW846 6020	10/22-10/28/08	K05DE1C2
	ND	2.96	2.36	mg/kg	80	2.4	SW846 6020	10/22-10/28/08	K05DE1C3
			Dilution Factor: 5						
Arsenic									
	0.47	12.0	10.4	mg/kg	83		SW846 6020	10/22-10/28/08	K05DE1CA
	0.47	11.8	9.90	mg/kg	80	4.6	SW846 6020	10/22-10/28/08	K05DE1CC
			Dilution Factor: 5						
Barium									
	1.1	12.0	11.0	mg/kg	83		SW846 6020	10/22-10/28/08	K05DE1CD
	1.1	11.8	10.4 N	mg/kg	78	6.1	SW846 6020	10/22-10/28/08	K05DE1CE
			Dilution Factor: 5						
Beryllium									
	ND	12.0	9.63	mg/kg	80		SW846 6020	10/22-10/28/08	K05DE1CF
	ND	11.8	9.42	mg/kg	80	2.2	SW846 6020	10/22-10/28/08	K05DE1CG
			Dilution Factor: 5						
Cadmium									
	ND	12.0	10.0	mg/kg	83		SW846 6020	10/22-10/28/08	K05DE1CH
	ND	11.8	9.66	mg/kg	81	3.5	SW846 6020	10/22-10/28/08	K05DE1CJ
			Dilution Factor: 5						
Chromium									
	1.2	12.0	11.3	mg/kg	84		SW846 6020	10/22-10/28/08	K05DE1CP
	1.2	11.8	11.2	mg/kg	85	0.49	SW846 6020	10/22-10/28/08	K05DE1CQ
			Dilution Factor: 5						
Cobalt									
	0.37	12.0	10.1	mg/kg	82		SW846 6020	10/22-10/28/08	K05DE1CK
	0.37	11.8	9.96	mg/kg	81	1.7	SW846 6020	10/22-10/28/08	K05DE1CL
			Dilution Factor: 5						

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: G8J210326 **Matrix.....:** BIOLOGIC
Date Sampled...: 09/29/08 **Date Received..:** 10/03/08

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper									
	1.6	12.0	11.3	mg/kg	81		SW846 6020	10/22-10/28/08	K05DE1CR
	1.6	11.8	11.3	mg/kg	82	0.12	SW846 6020	10/22-10/28/08	K05DE1CT
			Dilution Factor: 5						
Iron									
	47.2	59.9	112	mg/kg	108		SW846 6020	10/22-10/28/08	K05DE1CU
	47.2	59.2	105	mg/kg	98	6.5	SW846 6020	10/22-10/28/08	K05DE1CV
			Dilution Factor: 5						
Lead									
	ND	12.0	9.70 N	mg/kg	79		SW846 6020	10/22-10/28/08	K05DE1C0
	ND	11.8	9.23 N	mg/kg	76	5.0	SW846 6020	10/22-10/28/08	K05DE1C1
			Dilution Factor: 5						
Manganese									
	3.1	12.0	13.3	mg/kg	85		SW846 6020	10/22-10/28/08	K05DE1CW
	3.1	11.8	12.4 N	mg/kg	78	6.8	SW846 6020	10/22-10/28/08	K05DE1CX
			Dilution Factor: 5						
Selenium									
	0.49	12.0	9.96 N	mg/kg	79		SW846 6020	10/22-10/28/08	K05DE1C4
	0.49	11.8	9.57 N	mg/kg	77	4.0	SW846 6020	10/22-10/28/08	K05DE1C5
			Dilution Factor: 5						
Silver									
	ND	2.99	2.28 N	mg/kg	76		SW846 6020	10/22-10/28/08	K05DE1CM
	ND	2.96	2.29 N	mg/kg	77	0.34	SW846 6020	10/22-10/28/08	K05DE1CN
			Dilution Factor: 5						
Thallium									
	ND	2.99	2.51	mg/kg	84		SW846 6020	10/22-10/28/08	K05DE1C6
	ND	2.96	2.31 N	mg/kg	78	8.5	SW846 6020	10/22-10/28/08	K05DE1C7
			Dilution Factor: 5						
Vanadium									
	ND	12.0	9.45 N	mg/kg	79		SW846 6020	10/22-10/28/08	K05DE1C8
	ND	11.8	9.14 N	mg/kg	77	3.4	SW846 6020	10/22-10/28/08	K05DE1C9
			Dilution Factor: 5						
Zinc									
	7.2	12.0	17.2	mg/kg	83		SW846 6020	10/22-10/28/08	K05DE1DA
	7.2	11.8	16.8	mg/kg	81	2.2	SW846 6020	10/22-10/28/08	K05DE1DC
			Dilution Factor: 5						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

BIOLOGIC, 8290, Percent Lipids

Tetra Tech Inc

Client Sample ID: SBNS-01-A

Trace Level Organic Compounds

Lot-Sample #...: G8J210326-001 **Work Order #...:** K1ACH1A2 **Matrix.....:** BIOLOGIC
Date Sampled...: 10/01/08 **Date Received..:** 10/21/08
Prep Date.....: 10/21/08 **Analysis Date..:** 10/25/08
Prep Batch #...: 8295610
Dilution Factor: 1
% Moisture.....: 38

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
Percent Lipids	**0.77**	**0.10**	**%**	**SW846 8290**

BIOLOGICAL, D 2216-90, Percent Moisture

Tetra Tech Inc

Client Sample ID: SBNS-01-A

General Chemistry

Lot-Sample #...: G8J210326-001 **Work Order #...:** K1ACH **Matrix.....:** BIOLOGIC
Date Sampled...: 10/01/08 **Date Received..:** 10/21/08
% Moisture.....: 38

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	**37.7**	**0.10**	**%**	**ASTM D 2216-90**	**10/27-10/28/08**	**8301433**

Dilution Factor: 1 MDL.....: 0.10