



STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Tel: 314 298 8566 Fax: 314 298 8757
www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. 300 AREA TEDF

R06-001

Lot #: F6L200297

SDG #: W05081

John Trechter

Fluor Hanford Inc
600 Area, MO280, MSIN S3-30
Richland, WA 99352

SEVERN TRENT LABORATORIES, INC.

A handwritten signature in cursive script that reads "James M. Klym".

for
Brian O'Donnell
Project Manager

January 11, 2007

Case Narrative
Lot Number: **F6L200297**
SDG: **W05081**

This report contains the analytical results for the sample received under chain of custody by STL St. Louis on December 20, 2006. This sample is associated with your R06-001 project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted below.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by STL St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

Volatiles by EPA 624

The MS recovery for Methylene Chloride is outside the established QC limits. The RPD is within method acceptance criteria indicating a possible matrix interference. Method performance is demonstrated by acceptable LCS recovery.

Affected Samples:

F6L200297 (1): TEDF1219061

Mercury by EPA 245.2

The initial ICV recovery was outside the upper QC limit (greater than 105%), indicating a potential high bias in the samples associated with this ICV. Mercury was not detected above the reporting limit in the associated sample.

Affected Samples:

F6L200297 (1): TEDF1219061

Nitrite by EPA 354.1

The associated sample was analyzed 30 minutes past the analytical holding time.

Affected Samples:

F6L200297 (1): TEDF1219061

There were no observations or nonconformances to report for the following analyses:

Ammonia by EPA 350.1

ICP Metals by EPA 200.7

Semivolatiles by EPA 625

METHODS SUMMARY

F6L200297

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Base/Neutrals and Acids	CFR136A 625	CFR136A 625
Mercury (Automated Cold Vapor Technique)	MCAWW 245.2	
Nitrite	MCAWW 354.1	
Nitrogen, Ammonia	MCAWW 350.1	MCAWW 350.1
Purgeables	CFR136A 624	SW846 5030B
Trace Inductively Coupled Plasma (ICP) Metals	MCAWW 200.7	MCAWW 200.7

References:

CFR136A "Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SAMPLE SUMMARY

F6L200297

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
JLWTW	001	TEDF1219061	12/19/06	08:08

NOTE (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.

Fluor Hanford Inc

Client Sample ID: TEDF1219061

GC/MS Volatiles

Lot-Sample #...: F6L200297-001 Work Order #...: JLWTW1AD Matrix.....: WATER
 Date Sampled...: 12/19/06 Date Received...: 12/20/06
 Prep Date.....: 12/20/06 Analysis Date...: 12/20/06
 Prep Batch #...: 6354527
 Dilution Factor: 1 Method.....: CFR136A 624

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromodichloromethane	ND	2.2	ug/L	0.14
Chloroform	2.4 J	5.0	ug/L	0.19
1,1-Dichloroethane	ND	4.7	ug/L	0.16
Methylene chloride	ND	5.0	ug/L	0.10
Tetrachloroethene	ND	5.0	ug/L	0.19
Toluene	ND	5.0	ug/L	0.20
1,1,1-Trichloroethane	ND	5.0	ug/L	0.15
Trichloroethene	ND	1.9	ug/L	0.20

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	77	(70 - 123)
Toluene-d8	111	(75 - 126)
4-Bromofluorobenzene	109	(72 - 124)

NOTE(S) :

J Estimated result. Result is less than RL.

Fluor Hanford Inc

TEDF1219061

GC/MS Volatiles

Lot-Sample #: F6L200297-001

Work Order #: JLWTW1AD

Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

<u>PARAMETER</u>	<u>CAS #</u>	<u>ESTIMATED RESULT</u>	<u>RETENTION TIME</u>	<u>UNITS</u>
None				ug/L

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F6L200297 Work Order #...: JLW5C1AA Matrix.....: WATER
 MB Lot-Sample #: F6L200000-527
 Prep Date.....: 12/20/06
 Analysis Date...: 12/20/06 Prep Batch #...: 6354527
 Dilution Factor: 1

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Bromodichloromethane	ND	2.2	ug/L	CFR136A 624
Chloroform	ND	5.0	ug/L	CFR136A 624
1,1-Dichloroethane	ND	4.7	ug/L	CFR136A 624
Methylene chloride	0.45 J	5.0	ug/L	CFR136A 624
Tetrachloroethene	ND	5.0	ug/L	CFR136A 624
Toluene	ND	5.0	ug/L	CFR136A 624
1,1,1-Trichloroethane	ND	5.0	ug/L	CFR136A 624
Trichloroethene	ND	1.9	ug/L	CFR136A 624

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	75	(45 - 122)
Toluene-d8	110	(90 - 121)
4-Bromofluorobenzene	104	(75 - 104)

NOTE (S) :

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

J Estimated result. Result is less than RL.

Fluor Hanford Inc
Method Blank Report
GC/MS Volatiles

Lot-Sample #: F6L200000-527 B Work Order #: JLW5C1AA Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

<u>PARAMETER</u>	<u>CAS #</u>	<u>ESTIMATED RESULT</u>	<u>RETENTION TIME</u>	<u>UNITS</u>
None				ug/L

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: F6L200297 Work Order #...: JLW5C1AC Matrix.....: WATER
 LCS Lot-Sample#: F6L200000-527
 Prep Date.....: 12/20/06 Analysis Date...: 12/20/06
 Prep Batch #...: 6354527
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u> <u>AMOUNT</u>	<u>MEASURED</u> <u>AMOUNT</u>	<u>UNITS</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>METHOD</u>
Trichloroethene	20.0	18.3	ug/L	92	CFR136A 624
Toluene	20.0	21.7	ug/L	108	CFR136A 624
Bromodichloromethane	20.0	17.1	ug/L	85	CFR136A 624
Chloroform	20.0	16.6	ug/L	83	CFR136A 624
1,1-Dichloroethane	20.0	16.9	ug/L	84	CFR136A 624
Methylene chloride	20.0	16.3	ug/L	81	CFR136A 624
Tetrachloroethene	20.0	18.2	ug/L	91	CFR136A 624
1,1,1-Trichloroethane	20.0	17.8	ug/L	89	CFR136A 624

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
1,2-Dichloroethane-d4	73	(70 - 134)
Toluene-d8	104	(88 - 129)
4-Bromofluorobenzene	90	(72 - 113)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: F6L200297 Work Order #...: JLDTK1AC-MS Matrix.....: WATER
 MS Lot-Sample #: F6L130207-004 JLDTK1AD-MSD
 Date Sampled...: 12/12/06 Date Received...: 12/13/06
 Prep Date.....: 12/20/06 Analysis Date...: 12/20/06
 Prep Batch #...: 6354527
 Dilution Factor: 1

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCNT		METHOD
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	
Toluene	ND	20.0	21.4	ug/L	107		CFR136A 624
	ND	20.0	21.4	ug/L	107	0.04	CFR136A 624
Bromodichloromethane	ND	20.0	16.8	ug/L	84		CFR136A 624
	ND	20.0	17.2	ug/L	86	2.2	CFR136A 624
Chloroform	ND	20.0	16.1	ug/L	80		CFR136A 624
	ND	20.0	16.2	ug/L	81	0.92	CFR136A 624
1,1-Dichloroethane	ND	20.0	16.5	ug/L	83		CFR136A 624
	ND	20.0	16.7	ug/L	83	1.0	CFR136A 624
Methylene chloride	0.27	20.0	15.8	ug/L	78		CFR136A 624
	0.27	20.0	16.3	ug/L	80	2.7	CFR136A 624
Tetrachloroethene	ND	20.0	17.8	ug/L	89		CFR136A 624
	ND	20.0	17.3	ug/L	87	3.0	CFR136A 624
1,1,1-Trichloroethane	ND	20.0	17.4	ug/L	87		CFR136A 624
	ND	20.0	17.1	ug/L	86	1.8	CFR136A 624
Trichloroethene	ND	20.0	17.8	ug/L	89		CFR136A 624
	ND	20.0	17.9	ug/L	90	0.56	CFR136A 624

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	77	(45 - 122)
	71	(45 - 122)
Toluene-d8	110	(90 - 121)
	105	(90 - 121)
4-Bromofluorobenzene	94	(75 - 104)
	95	(75 - 104)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: F6L200297 Work Order #...: JLWTW1AL-MS Matrix.....: WATER
 MS Lot-Sample #: F6L200297-001 JLWTW1AM-MSD
 Date Sampled...: 12/19/06 Date Received...: 12/20/06
 Prep Date.....: 12/20/06 Analysis Date...: 12/21/06
 Prep Batch #...: 6354527
 Dilution Factor: 1

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCNT		METHOD
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	
Toluene	ND	20.0	20.8	ug/L	104		CFR136A 624
	ND	20.0	21.0	ug/L	105	0.91	CFR136A 624
Bromodichloromethane	ND	20.0	15.6	ug/L	78		CFR136A 624
	ND	20.0	16.4	ug/L	82	5.6	CFR136A 624
Chloroform	2.4	20.0	16.9	ug/L	73		CFR136A 624
	2.4	20.0	18.0	ug/L	78	6.1	CFR136A 624
1,1-Dichloroethane	ND	20.0	15.4	ug/L	77		CFR136A 624
	ND	20.0	16.2	ug/L	81	4.9	CFR136A 624
Methylene chloride	ND	20.0	14.6	ug/L	73 a		CFR136A 624
	ND	20.0	16.0	ug/L	80	9.3	CFR136A 624
Tetrachloroethene	ND	20.0	17.7	ug/L	88		CFR136A 624
	ND	20.0	17.5	ug/L	87	1.1	CFR136A 624
1,1,1-Trichloroethane	ND	20.0	16.4	ug/L	82		CFR136A 624
	ND	20.0	16.6	ug/L	83	1.5	CFR136A 624
Trichloroethene	ND	20.0	16.8	ug/L	84		CFR136A 624
	ND	20.0	17.7	ug/L	88	5.0	CFR136A 624

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	67	(45 - 122)
	72	(45 - 122)
Toluene-d8	105	(90 - 121)
	106	(90 - 121)
4-Bromofluorobenzene	90	(75 - 104)
	96	(75 - 104)

NOTE(S) :

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

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

Fluor Hanford Inc

Client Sample ID: TEDF1219061

GC/MS Semivolatiles

Lot-Sample #...: F6L200297-001 Work Order #...: JLWTW1AC Matrix.....: WATER
Date Sampled...: 12/19/06 Date Received...: 12/20/06
Prep Date.....: 12/21/06 Analysis Date...: 12/27/06
Prep Batch #...: 6355156
Dilution Factor: 1 Method.....: CFR136A 625

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	1.0

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
2-Fluorobiphenyl	69	(48 - 83)
2-Fluorophenol	44	(24 - 48)
2,4,6-Tribromophenol	68	(52 - 102)
Nitrobenzene-d5	73	(54 - 86)
Phenol-d5	29	(19 - 34)
Terphenyl-d14	70	(48 - 94)

Fluor Hanford Inc

TEDF1219061

GC/MS Semivolatiles

Lot-Sample #: F6L200297-001

Work Order #: JLWTW1AC

Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

<u>PARAMETER</u>	<u>CAS #</u>	<u>ESTIMATED RESULT</u>	<u>RETENTION TIME</u>	<u>UNITS</u>
None				ug/L

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F6L200297
 MB Lot-Sample #: F6L210000-156

Work Order #...: JLXNK1AA

Matrix.....: WATER

Prep Date.....: 12/21/06

Analysis Date...: 12/27/06

Prep Batch #...: 6355156

Dilution Factor: 1

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	CFR136A 625

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
2-Fluorobiphenyl	59	(48 - 83)
2-Fluorophenol	41	(24 - 48)
2,4,6-Tribromophenol	61	(52 - 102)
Nitrobenzene-d5	64	(54 - 86)
Phenol-d5	29	(19 - 34)
Terphenyl-d14	67	(48 - 94)

NOTE (S) :

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

Fluor Hanford Inc

Method Blank Report

GC/MS Semivolatiles

Lot-Sample #: F6L210000-156 B Work Order #: JLXNK1AA

Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

<u>PARAMETER</u>	<u>CAS #</u>	<u>ESTIMATED RESULT</u>	<u>RETENTION TIME</u>	<u>UNITS</u>
None				ug/L

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: F6L200297 Work Order #...: JLXNK1AC Matrix.....: WATER
 LCS Lot-Sample#: F6L210000-156
 Prep Date.....: 12/21/06 Analysis Date...: 12/27/06
 Prep Batch #...: 6355156
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u> <u>AMOUNT</u>	<u>MEASURED</u> <u>AMOUNT</u>	<u>UNITS</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>METHOD</u>
bis(2-Ethylhexyl) phthalate	100	78.6	ug/L	79	CFR136A 625

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
2-Fluorobiphenyl	74	(45 - 87)
2-Fluorophenol	48	(28 - 49)
2,4,6-Tribromophenol	73	(61 - 96)
Nitrobenzene-d5	76	(55 - 85)
Phenol-d5	32	(22 - 35)
Terphenyl-d14	72	(60 - 86)

NOTE(S) :

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: F6L200297 Work Order #...: JLWTW1AX-MS Matrix.....: WATER
 MS Lot-Sample #: F6L200297-001 JLWTW1A0-MSD
 Date Sampled...: 12/19/06 Date Received...: 12/20/06
 Prep Date.....: 12/21/06 Analysis Date...: 12/27/06
 Prep Batch #...: 6355156
 Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
bis(2-Ethylhexyl) phthalate	ND	96.9	80.1	ug/L	83		CFR136A 625
	ND	95.9	73.2	ug/L	76	9.0	CFR136A 625

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	77	(48 - 83)
	74	(48 - 83)
2-Fluorophenol	47	(24 - 48)
	44	(24 - 48)
2,4,6-Tribromophenol	76	(52 - 102)
	78	(52 - 102)
Nitrobenzene-d5	78	(54 - 86)
	71	(54 - 86)
Phenol-d5	31	(19 - 34)
	29	(19 - 34)
Terphenyl-d14	73	(48 - 94)
	69	(48 - 94)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters

Fluor Hanford Inc

Client Sample ID: TEDF1219061

TOTAL Metals

Lot-Sample #...: F6L200297-001

Matrix.....: WATER

Date Sampled...: 12/19/06

Date Received...: 12/20/06

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
------------------	---------------	----------------------------------	--------------	---------------	---	-------------------------------

Prep Batch #...: 6355213

Iron	ND	100	ug/L	MCAWW 200.7	12/21-12/26/06	JLWTW1AF
		Dilution Factor: 1		MDL.....: 25.0		

Prep Batch #...: 6361064

Mercury	ND	0.20	ug/L	MCAWW 245.2	12/27/06	JLWTW1AG
		Dilution Factor: 1		MDL.....: 0.046		

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F6L200297

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
MB Lot-Sample #: F6L210000-213				Prep Batch #...: 6355213		
Iron	ND	100	ug/L	MCAWW 200.7	12/21-12/26/06	JLXXH1AA
		Dilution Factor: 1				

MB Lot-Sample #: F6L270000-064				Prep Batch #...: 6361064		
Mercury	ND	0.20	ug/L	MCAWW 245.2	12/27/06	JL50C1AA
		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 #...: F6L200297

Matrix.....: WATER

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCNT RECVRY</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
------------------	---------------------	------------------------	--------------	----------------------	---------------	-----------------------------------	---------------------

LCS Lot-Sample#: F6L210000-213 Prep Batch #...: 6355213							
Iron	500	547	ug/L	109	MCAWW 200.7	12/21-12/26/06	JLXXH1AC
Dilution Factor: 1							

LCS Lot-Sample#: F6L270000-064 Prep Batch #...: 6361064							
Mercury	1.00	0.999	ug/L	100	MCAWW 245.2	12/27/06	JL50C1AC
Dilution Factor: 1							

NOTE (S) :

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

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: F6L200297

Matrix.....: WATER

Date Sampled...: 12/19/06

Date Received...: 12/20/06

<u>PARAMETER</u>	<u>SAMPLE AMOUNT</u>	<u>SPIKE AMT</u>	<u>MEASRD AMOUNT</u>	<u>UNITS</u>	<u>PERCNT RECVRY</u>	<u>RPD</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
------------------	----------------------	------------------	----------------------	--------------	----------------------	------------	---------------	-----------------------------------	---------------------

MS Lot-Sample #: F6L200297-001 Prep Batch #...: 6355213

Iron

ND	500	512	ug/L	102			MCAWW 200.7	12/21-12/26/06	JLWTW1AP
ND	500	535	ug/L	107	4.4		MCAWW 200.7	12/21-12/26/06	JLWTW1AQ

Dilution Factor: 1

MS Lot-Sample #: F6L200297-001 Prep Batch #...: 6361064

Mercury

ND	1.00	1.04	ug/L	104			MCAWW 245.2	12/27/06	JLWTW1AR
ND	1.00	0.967	ug/L	97	7.3		MCAWW 245.2	12/27/06	JLWTW1AT

Dilution Factor: 1

NOTE(S) :

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

Fluor Hanford Inc

Client Sample ID: TEDF1219061

General Chemistry

Lot-Sample #...: F6L200297-001
Date Sampled...: 12/19/06

Work Order #...: JLWTW
Date Received...: 12/20/06

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Nitrite as N	ND	50.0	ug/L	MCAWW 354.1	12/21/06	6355114
		Dilution Factor: 1		MDL.....: 14.3		
Nitrogen, as Ammonia	ND	50.0	ug/L	MCAWW 350.1	01/10/07	7009221
		Dilution Factor: 1		MDL.....: 5.5		

METHOD BLANK REPORT

General Chemistry

Client Lot #...: F6L200297

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
		<u>LIMIT</u>	<u>UNITS</u>		<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Nitrite as N	ND	Work Order #: JLXJJ1AA 50.0	ug/L	MB Lot-Sample #: F6L210000-114 MCAWW 354.1	F6L210000-114 12/21/06	6355114
		Dilution Factor: 1				
Nitrogen, as Ammonia	ND	Work Order #: JMMLN1AA 50.0	ug/L	MB Lot-Sample #: F7A090000-221 MCAWW 350.1	F7A090000-221 01/10/07	7009221
		Dilution Factor: 1				

NOTE (S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: F6L200297

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Nitrite as N							WO#:JLXJJ1AC-LCS/JLXJJ1AD-LCSD LCS Lot-Sample#: F6L210000-114	
	400	380	ug/L	95		MCAWW 354.1	12/21/06	6355114
	400	383	ug/L	96	0.87	MCAWW 354.1	12/21/06	6355114
Dilution Factor: 1								

Nitrogen, as Ammonia							WO#:JMKLN1AC-LCS/JMKLN1AD-LCSD LCS Lot-Sample#: F7A090000-221	
	400	371	ug/L	93		MCAWW 350.1	01/10/07	7009221
	400	371	ug/L	93	0.11	MCAWW 350.1	01/10/07	7009221
Dilution Factor: 1								

NOTE(S) :

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

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: F6L200297

Matrix.....: WATER

Date Sampled...: 12/19/06

Date Received...: 12/20/06

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Nitrite as N	ND	500	516	ug/L	103	MCAWW 354.1	12/21/06	6355114
			Work Order #...: JLWTW1AU MS Lot-Sample #: F6L200297-001					
			Dilution Factor: 1					
Nitrogen, as Ammonia	ND	500	531	ug/L	106	MCAWW 350.1	01/10/07	7009221
			Work Order #...: JLWTW1AN MS Lot-Sample #: F6L200297-001					
			Dilution Factor: 1					

NOTE(S) :

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

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F6L200297

Work Order #...: JLWTW-SMP
JLWTW-DUP

Matrix.....: WATER

Date Sampled...: 12/19/06

Date Received...: 12/20/06

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE</u> <u>RESULT</u>	<u>UNITS</u>	<u>RPD</u>	<u>RPD</u> <u>LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Nitrogen, as Ammonia	ND	ND	ug/L	0	(0-20)	MCAWW 350.1	01/10/07	7009221
			Dilution Factor: 1					
Nitrite as N	ND	ND	ug/L	0	(0-20)	MCAWW 354.1	12/21/06	6355114
			Dilution Factor: 1					

SDG: W05081

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. No. N/A
Page 1 of 1

CR5686

Collector T.A. KLUTE	Contact/Requestor DALE L. HALGREN	Telephone No. 376-9988	MSIN L6-05	FAX 376-6423
SAF No. R06-001	Sample Origin TW-V-582 310 TEDF 300 AREA	Purchase Order/Charge Code 118810 / CA40		
Project Title 300 AREA TEDF NPDES COMPLIANCE SAMPLES	Logbook No. N/A	Ice Chest No. N/A	Temp. COOL TO 4 degrees C.	
Shipped To (Lab) SEVERN TRENT	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A		
Protocol CLEAN WATER ACT	Data Turnaround 15 DAYS PRIORITY	Offsite Property No. N/A		

Sample No.	Lab ID	*	Date	Time	No./Type Container	Sample Analysis	Preservative
TEDF1219061		W	12-19-6	0755	4/aGs 40mL	PURGEABLES EPA624	HCl pH<2
TEDF1219061		W		0759	4/aG 1L	BASE/ NEUTRALS AND ACIDS EPA625	Cool 4Deg C
TEDF1219061		W		0803	1/POLY 500mL	METALS Fe EPA200.7	HNO3 pH <2
TEDF1219061		W		0804	1/POLY 250mL	NITRITE 354.1M	COOL 4DEG C
TEDF1219061		W		0805	1/POLY 500mL	AMMONIA EPA350.1	H2SO4 pH <2
TEDF1219061		W		0806	1/POLY 1L	GROSS ALPHA & BETA GA GB	HNO3 pH <2
TEDF1219061		W		0807	1/POLY 2L	TOTAL RADIUM TOTAL/Ra	HNO3 pH <2
TEDF1219061		W		0808	1/POLY 1L	METALS Hg EPA245.2(CV)	HNO3 pH <2
TEDF0815061		W		0809	1/POLY 20mL	ACTIVITY SCAN	NONE

POSSIBLE SAMPLE HAZARDS/REMARKS (List all known wastes) MSDS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	SPECIAL INSTRUCTIONS	Hold Time
NONE	Enhanced detection limits agreed to by R.L. Merrell 10/18/94 required. Exception: Chloroform PQL 5 ug/L. Contact JE Trechter ASAP if sample results are =>than enhanced detection limits.	

Relinquished By T.A. Klute	Print T.A. Klute	Sign T.A. Klute	Date/Time 12-19-6 0850	Received By SAMPLE FRIDGE	Print SAMPLE FRIDGE	Sign SAMPLE FRIDGE	Date/Time 12-19-6 0850	Matrix* S = Soil DS = Drum Solids SE = Sediment DL = Drum Liquids SO = Solid T = Tissue SL = Sludge WI = Wipe W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By SAMPLE FRIDGE	Print SAMPLE FRIDGE	Sign SAMPLE FRIDGE	Date/Time 12-19-6 1330	Received By T.A. Klute	Print T.A. Klute	Sign T.A. Klute	Date/Time 12-19-6 1330	
Relinquished By T.A. Klute	Print T.A. Klute	Sign T.A. Klute	Date/Time 12-19-6 1350	Received By S. Smith	Print S. Smith	Sign S. Smith	Date/Time 12-19-06 1350	
Relinquished By S. Smith	Print S. Smith	Sign S. Smith	Date/Time 12-19-06 1530	Received By CARLA BREW	Print CARLA BREW	Sign CARLA BREW	Date/Time 12-19-06 9:25 AM	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By			Date/Time	

All samples containing hazardous materials shall be picked up by requestor and returned to parent container or site of origin.

Stayed in Richmond

F6L200297

CLIENT ANALYSIS SUMMARY

Storage Loc: 2-243,MET,HAN

Project Manager: MLH Quote #: 47975 SDG: W05081
Project: 300 AREA TEDF R06-001
PO#: 615 Report to: John Trechter
Client: 108302 Fluor Hanford Inc

Date Received: 2006-12-20
Analytical Due Date: 2006-12-29
Report Due Date: 2006-12-29
Report Type: B Standard Report
EDD Code: FEAD1

#SMPS in LOT: 1

Sample Contort: Log in QC Received date is date received in Richland.
SDG should be assigned by Richland, check w/ PM.
Nitrite has short hold time. Notify PM if exceeded. VOA: notify PM if Chloroform >= 10 ug/l. Re-inject.
Notify PM if any parameter exceeds the CRDL. Do NOT dilute Nitrite to bring spike in control

Table with columns: SAMPLE #, CLIENT SAMPLE ID, DATE/TIME SAMPLED, WORKORDER, and !. Contains multiple rows of sample analysis data including sample IDs like TEDF1219061 and various test results.

F6L200297

CLIENT COMMENTS SUMMARY

Storage Loc: **2-243,MET,HAN**
Date Received: 2006-12-20
Analytical Due Date: 2006-12-29
Report Due Date: 2006-12-29
Report Type: B Standard Report
EDD Code: FEAD1

Project Manager: MLH Quote #: 47975 SDG: W05081
Project: 300 AREA TEDF R06-001
PO#: 615 Report to: John Trechter
Client: 108302 Fluor Hanford Inc

#SMPS in LOT: 1

Sample Contorl:
Log in QC
Received date is date received in Richland.
SDG should be assigned by Richland, check w/ PM.

Nitrite has short hold time. Notify PM if exceeded.
VOA: notify PM if Chloroform >= 10 ug/l. Re-inject.

Notify PM if any parameter exceeds the CRDL.

Do NOT dilute Nitrite to bring spike in control

Hanford samples should be batched by themselves

From: Origin ID: (509)375-3131
 Shipping Dept.
 SEVERN TRENT LABORATORIES
 2800 GEORGE WASHINGTON WAY

RICHLAND, WA 99354



CLS 100 306/19/23

Ship Date: 19DEC06
 ActWgt: 39 LB
 System#: 1033413/INET2500
 Account#: S *****

REF: TEDF



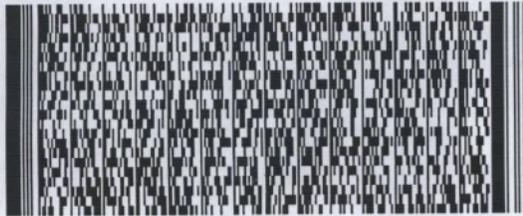
Delivery Address Bar Code

SHIP TO: (314)298-8566

BILL RECIPIENT

Sample Control
STL St. Louis
13715 N. Rider Trail

Earth City, MO 63045



PRIORITY OVERNIGHT

WED

TRK# **7922 6033 4085**

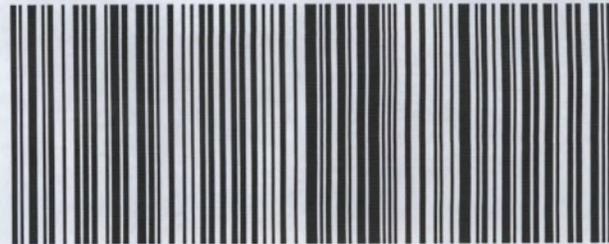
FORM
0201

Deliver By:
20DEC06

STL A1

63045 -MO-US

XX ALNA



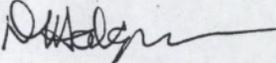
Shipping Label: Your shipment is complete

1. Use the 'Print' feature from your browser to send this page to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Memorandum

To: J.E. Trechter
Date: November 16, 2005
Location: S3-30
From: D.L. Halgren 
Location: L6-05
Subject: 300 Area Treated Effluent Disposal Facility Activity Screen Exemption

This letter exempts process water samples from the 300 Area Treated Effluent Disposal Facility (TEDF) from radioactive screening prior to shipment to offsite laboratories for analysis. This letter shall accompany each shipment of samples in lieu of radioactive screening results.

The 300 Area TEDF is a non-nuclear industrial wastewater treatment facility. It does not accept wastewater greater than drinking water standards and is not permitted to treat or discharge radioactive wastewater to the Columbia River.

Composite samples have been taken continuously since 1995 to monitor the radioactivity of the wastewater. Over the life of the facility the average activity has been less than 2 picoCuries per liter (pCi/l) for both total alpha and beta with maximum results at 21 and 7 pCi/l respectively.

If you have any questions regarding this matter, please contact me on 376-9988.