AR_N00236_003284
ALAMEDA POINT
SSIC NO. 5090.3.A

Innovative Technical Solutions, Inc.

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DATA DELIVERABLE FOR NON-ROUTINE GROUNDWATER SAMPLING EVENT AT ALAMEDA SITE IR32 – SUMMER 2008

Innovative Technical Solutions Inc. (ITSI) conducted a non-routine groundwater sampling event at the request of U.S. Navy to support the ongoing Remedial Design/Remedial Action activities at the IR32 site. This non-routine sampling round was performed in June 2008 and consisted of groundwater sampling activities at five monitoring wells across IR32 (Figure 1). Groundwater sampling activities were conducted in accordance with the procedures and methods described in the Alameda Basewide Final Work Plan (Shaw Environmental Inc. [Shaw], 2004) and the ITSI SAP Addendum 02 (ITSI, 2004).

Groundwater sampling activities were conducted on June 6, 2008. A low flow monitoring and purging technique using a peristaltic pump was employed to sample all five wells. In order to sample groundwater in a state of equilibrium with the aquifer, indicator parameters of pH, temperature, specific conductivity, ORP, dissolved oxygen, and turbidity were monitored approximately every five minutes until three successive readings were within the required stabilization criteria specified on the purge logs prior to sampling. Once stabilization was achieved, groundwater samples were collected at a low flow rate directly from the dedicated tubing at each well. Collected samples were transferred to pre-preserved laboratory supplied containers, immediately labeled, and chilled with ice in a cooler. Field records for sampling activities are included in Appendix 1.

Gorundwater samples collected during Summer 2008 event at IR32 were submitted to Curtis and Tompkins, Ltd, (C&T), in Berkeley, California, for laboratory analysis of Volatile Organic Compounds (VOCs) by EPA Method 8260B. A summary of laboratory analytical results is presented in Table 1. Laboratory analytical reports and chain-of custodies are included as Appendix 2.

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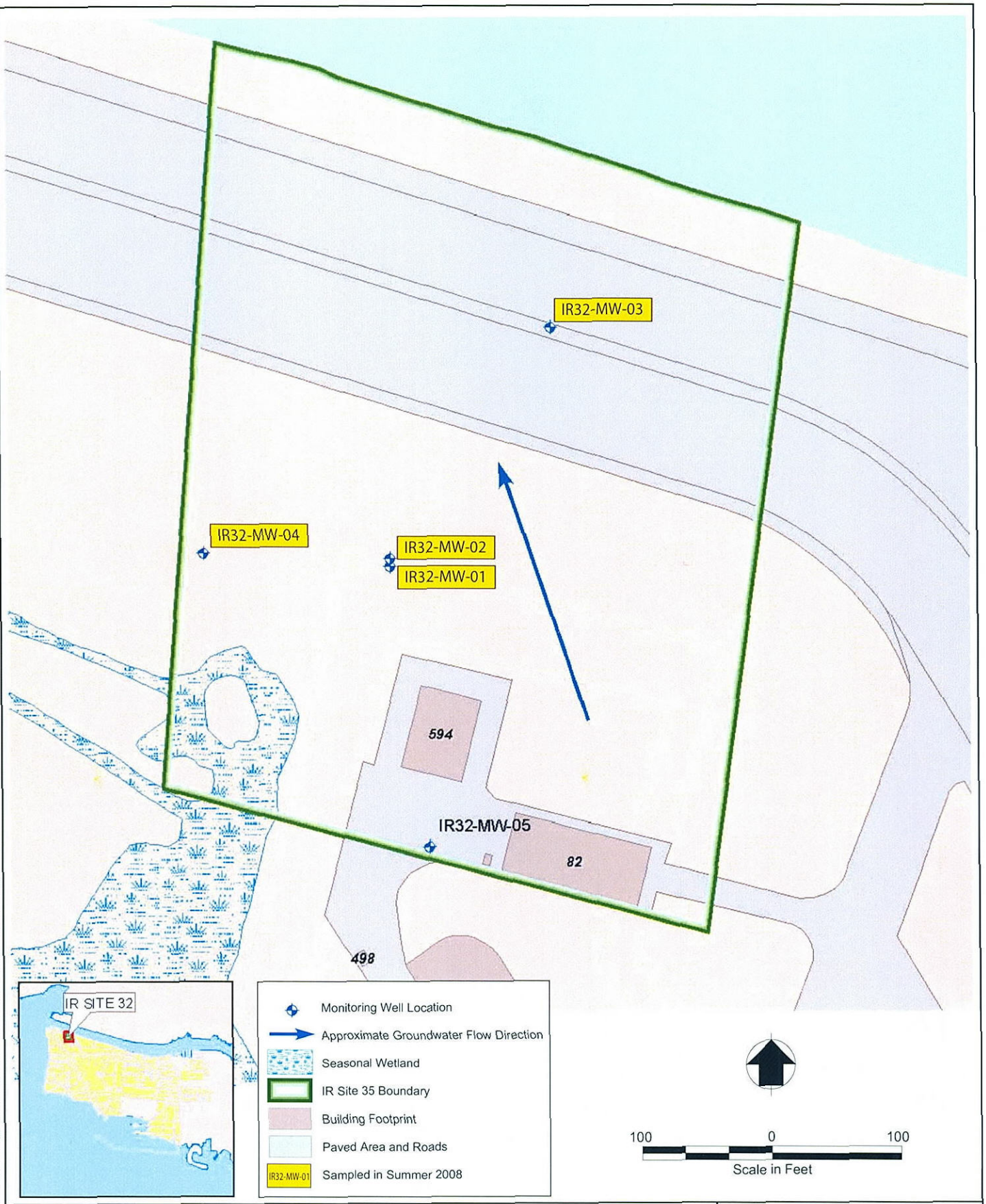
FIGURES



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U.S. DEPARTMENT OF THE NAVY, BASE REALIGNMENT AND CLOSURE
Program Management Office West
San Diego, California
Alameda Point, Alameda, California

FIGURE 1
Non-Routine Sampling Locations
IR Site 32
Summer 2008

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TABLES

TABLE 1
DATA SUMMARY FOR IR SITE 32 WELLS SAMPLED IN JUNE 2008
Alameda Point, Alameda, California

Well Identification Number:	MW-01	MW-02	MW-03	MW-04	MW-05
Date Sampled:	*6/6/2008*	*6/6/08*	*6/6/08*	*6/6/2008*	*6/6/2008*
Volatile Organics by GC/MS (EPA 8260B):					
1,1,1,2-Tetrachlorethane	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dibromo-3-Chloropropane	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dibromoethane	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	**0.4 J**	**0.2 J**	<0.5	**0.4 J**
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichloropropane	<0.5	<0.5	<0.05	<0.5	<0.5
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5
1.3-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5
2, 2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5
2-Butanone	<10	**0.3 J**	<10	<10	<10
2-Chlorotoluene	<0.5	<0.5	<0.5	<0.5	<0.5
2-Hexanone	<10	<10	<10	<10	<10
4-Chlorotoluene	<0.5	<0.5	<0.5	<0.5	<0.5
4-Methyl-2-Pentanone	**0.8 J**	<10	<10	<10	<10
Acetone	**0.5 J b**	**0.3J b**	**0.5 J b**	**0.5 J b**	**1.0 J b**
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5
Bromobenzene	<0.5	<0.5	<0.5	<0.5	<0.5
Bromochlormethane	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Disulfide	<0.5	<0.5	<0.5	<0.5	**0.1 J**
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	<0.5	<0.5	<0.5	**16**	<0.5
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<0.5	<0.5	<0.5	<0.5	<0.5
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1, 2-Dichloroethene	**0.2 J**	**10**	**17**	**1.0**	**1.9**
Dibromochloromethane	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	<0.5	<0.5	<0.5	<0.5	<0.5
Ethyl tert-Butyl Ether (ETBE)	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5
Freon 12	<1.0	<1.0	<1.0	<1.0	<1.0
Hexachlorobutadiene	<0.5	<0.5	<0.5	<0.5	<0.5
Isopropyl Ether (DIPE)	**0.1 J**	<0.5	<0.5	<0.5	<0.5
Isopropylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5
m,p-Xylenes	<0.5	<0.5	<0.5	**0.09 J**	<0.5
Methyl tert-Amyl Ether (TAME)	<0.5	<0.5	<0.5	<0.5	<0.5
Methylene Chloride	<10	<10	<10	<10	<10
MTBE	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	<2.0	<2.0	<2.0	<2.0	<2.0
n-Butylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 1
DATA SUMMARY FOR IR SITE 32 WELLS SAMPLED IN JUNE 2008
Alameda Point, Alameda, California

Well Identification Number:	MW-01	MW-02	MW-03	MW-04	MW-05
Date Sampled:	*6/6/2008*	*6/6/08*	*6/6/08*	*6/6/2008*	*6/6/2008*
para-Isopropyl Toluene	<0.5	<0.5	<0.5	<0.5	<0.5
Propylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5
sec-Butylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5
Styrene	<0.5	<0.5	<0.5	<0.5	<0.5
tert-Butyl Alcohol (TBA)	**15**	<10	<10	<10	<10
tert-Butylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	<0.5	<0.5	<0.5	**0.1 J**	<0.5
trans-1, 2-Dichloroethene	<0.5	**0.6**	**7.8**	<0.5	<0.5
Trichloroethene	<0.5	<0.5	**3.6**	<0.5	<0.5
Trichlorofluoromethane	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	<0.5	**2.2**	<0.5	**2.1**	<0.5

NOTES:

All results in micrograms per liter (μg/L).

Bold indicates detected results

J= Estimated value

<=Indicates not detected at the reporting limit indicated

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APPENDIX 1

FIELD REPORTS

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TAILGATE SAFETY MEETING

Date 10/6/08	Time 0700	Project Number	7033.0015
Project	Alameda Basewide Groundwater &		
Site Location	Alameda Point, Alameda, CA 399 West Seaplane Lagoon (Behind Building 112)		
Type of Work	Water Levels / Groundwater Sampling / Soil Vapor Sampling		
Chemicals Used (if any)	*Alconox Soap, HCL, HNO3, NaOH, Zinc Acetate*		

Management Contacts

Name	Phone	Name	Phone
Allen Cooley CIH (ITSI H&S)	*925-250-7943*	Rich Flynn (ITSI Chemist)	*925-946-3103*
Arvind Acharya (ITSI PM)	*510-719-6858*	Teresa Ruha (ITSI Task Manager)	*925-525-8210*

Safety Topics Presented

Protective Clothing/Equipment	**Level D (Hard Hat, Steel Toe Boots, Gloves, Safety Glasses, Safety Vest)**
Chemical Hazards	**Contact with Potentially Contaminated Groundwater**
Physical Hazards	**Slip, Trip, Fall / Spill, Splash; Vehicule Haz. (traffic); Biol. (bites / thorns)**
Emergency Procedures	**Meet at trailer and await further instructions** **911 and/or 510-523-4357**

Hospital *Alameda Hospital* Phone No. **510-523-4357** Ambulance Phone No. **510-523-4357**

Hospital Address	**2070 Clinton Avenue (Alameda)**
Special Equipment	**Sample Pump, Water Quality Meter, Depth to Water Meter**
Other	**Stay Hydrated, Use Sunscreen, Be Watchful of Slip, Trip, Fall Hazards**

Attendees

Name (Print)	Signature	Name (Print)	Signature
Shawn Baker			
Jerel Stelly			
[illegible]			
Brian Lee			
R. CHAPPLE	R. Chapple		
RAY SPENCER			

Conducted By: Teresa Ruha Signature: Teresa Ruha

Supervisor:

Alameda_tailgate

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DAILY FIELD NOTES

Job Name: Alameda Basewide Summer 08
Contractor: ITSI

Date: 6/6/08 Page 1 of 1
Weather: Sun, cool
LD/SB

0630: arrived on site attended morning safety meeting.
0700: Calibrated field instruments, loaded trucks.
0800: mobed to site 35 and located site wells
- Well MW01 was not at the map indicated location.
0830: Set up and started purge at well MW02.
- The Horiba U-22 meter showed very unstable parameter readings. Called field office for a replacement meter. Re-started purge with a YSI 556 meter - continued to stabilize well.
0934: Collected sample MW02-A7515
1000: Set up and started purge on well MW03.
1030: Collected sample MW03-A7516
: Set up and started purge on well MW04.
1135: Collected sample MW04 A7517
1200: Lunch
1230: Made another attempt to locate well MW01.
- Found well approx 50 yds from map location.
1300: Set up and started purge on well MW01
1325: Collected sample MW01-A7514 plus MS/MSD volume.
1400: Mobed back to field office and QC'd samples
- Cleaned up truck.
1500: Completed paperwork.

Signature: [signature] Date: 6/6/08

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By C. Simpson Date 6-6-02 Subject PK Manila GW monitoring Sheet No. 1 of 1

Chkd. By: _____ Date _____ Project No. _____

0630 AT ITSI Trailer
0645 Calibrated Horiba meter
0700 H&S Briefing
0715 load Truck w/ Sampling equipment
0730 To Site # 30
0745 AT MW-04, no hardware (tubing) installed
took TD and installed new tubing
0755 Start purge MW-04.
0820 End purge. Sampled well # MW-04-A7445
0835 AT MW-02, no hardware (tubing) installed.
Took TD and installed new tubing
0845 Start purge MW-02
0920 End purge. Sampled well # MW-02-A7442
0940 AT MW-01, no Hardware (tubing) installed
took TD and installed new tubing
0950 Start purge
1015 End purge Sampled well # MW-01-A7441
1025 AT MW-03, no Hardware, Installed new tubing
1035 Start purge
1110 End purge & sampled well # MW-03-A7443
1115 Duplicate # MW-03-A7444.
1130 lunch.
1240 AT MW-05 - no HARDWARE in well. Installed tubing
1250 Start purge
1315 End purge. Sampled well # MW-05-A7446
1330 To Trailer to unload equipment w/ samples

IR Site 32

ALAMEDA PURGE LOG AND SAMPLE COLLECTION FORM

Event: Summer 2008

Purge Date: 6.6.08

Well Number: **MW-01**

Weather: Sunny, Cloudy, Rain, Windy, Hot **Temperature:** 65 °F **Sample Team:** ☐ Team 1 ☒ Team 2 ☐ Team 3

Personal Air Monitoring:	Meter ID#	Results
PID:	pid	0
LEL:	mini 7000	0
02:		20.9

Measured Well Depth: 25.00 ft.
Depth to Water (DTW): 5.24 ft.
Calculated height of water in well (T=Well Depth - Depth to Water): 19.76 ft.

One Casing Volume= [T x (vol/ft) x 3.785]: .6573 49 liters
Casing Diameter (D): 4" D (see chart) inch
Verified Depth to Water: 5.24 ft.
Field calculated -- 1 casing vol.*: 49 liters
Field calculated -- 3 casing vol.*: 147 liters

FIELD PARAMETERS

Purge Time	Volume Removed: Liters	Volume Removed: Casing Volumes	Volume Removed: Pumping Rate	Temp °C	Conductivity (mS/cm)	pH	Turbidity (NTU)	ORP	DO	Odor	DTW	Comments
Verify Calibration			(ltr/min)	(+/-1 °C)	(+/- 3%)	(+/- 0.1)	NA	(+/- 10%)	(+/- 10% or if<1, 0.3)	(Y/N)	ft	
0950	–	–	.3	19.3	.480	7.91	59.3	-173	3.11	N	5.53	
0955	1.5	.03	.3	19.5	.486	7.95	42.7	-173	2.25	N	5.66	
1000	3.0	.06	.3	19.5	.481	7.99	48.9	-174	2.02	N	5.83	
1005	4.5	.09	.3	19.6	.476	8.03	54.7	-175	1.94	N	5.95	
1010	6.0	.12	.3	19.6	.479	8.05	71.6	-173	1.89	N	6.04	
1015	7.5	.15	.3	19.6	.478	8.06	77.5	-173	1.88	N	6.12	SMOS. 1.2008
Previous Log readings												

Sample Date: 6.6.08 **Sample Start Time:** 1015 **Sample End Time:** 1016 **Equipment Blank Collected:** N/A **Trip Blank Collected:** TB2-A7459

Pump Collected With: Peristaltic **Volatile Sample Flow Rate:** 100 mL/min

1/day/team when portable pump (or other non disposable reusable equipment) is used

Complete a Collected Sample Form for each blank collected.

Final Depth to Water 6.15 **MS/MSD** ☐

COLLECTED SAMPLE INFORMATION

	Ice + Preservative	HCL	NA	HCL	NA	NA	NA	NA	NA	HNO_3	NA	NaOH	---	---	NaOH+ zinc acetate	HNO_3	HNO_3	NA	HNO_3	HNO_3	HNO_3	HNO_3	NA	NA	NA
	WELL ID & SAMPLE TYPE	VOCs	Methane, ethane, ethene	TPH-p as gasoline	TPH-e as diesel, jet fuel, MO	SVOCs	PAHs	Pesticides	PCBs	Dissolved Metals	Hexavalent Chromium	Cyanide	Chloride, Sulfate	Nitrate, Nitrite	Alkalinity	Sulfide	Gross Alpha & Beta	Radium	Tritium Isotopes	Radium-228 Isotopes	Radioactive Strontium	Gamma Emitting Radionuclides	Uranium Isotopes	1,4-Dioxane	Ferrous Ion	TDS
	Number of Containers	3	2	2	2	1	2	2	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	2	1	1
	Sample Container	40 ml V	40 ml V	40 ml V	0.5 L A	1 L A	1 L A	1 L A	1 L A	0.5 L PE	0.25 L	0.5 L PE	0.25 L PE	0.25 L PE	0.5 L PE	1 L PE	1 L PE	0.25 L A	1 L PE	1 L PE	1 L PE	1 L PE	1 L A	0.1 L PE	0.25 L PE
MW-01-A7441	NS	X																							

The order of sample collection above is from left to right. Samples for metals are filtered

Comments:

3 Bottles

Sampler: CS/JS

IR Site 32

ALAMEDA PURGE LOG AND SAMPLE COLLECTION FORM

Event: Summer 2008

Well Number: MW-02

Purge Date: 6.6.08

Weather: Sunny, Cloudy, Rain, Windy, Hot **Temperature:** 61 **Sample Team:** [ ] Team 1 [X] Team 2 [ ] Team 3

Personal Air Monitoring:	Meter ID#	Results
PID:	Rae	0
LEL:	2000	0
02:		20.9

Measured Well Depth: 14.90 ft.
Depth to Water (DTW): 4.53 ft.
Calculated height of water in well (T=Well Depth - Depth to Water): 10.37 ft.

One Casing Volume= [T x (vol/ft) x 3.785]: 25.5 liters
D (see chart) 4"
Casing Diameter (D): 4" inch
Verified Depth to Water: 4.53 ft.
Field calculated -- 1 casing vol.*: 25.5 liters
Field calculated -- 3 casing vol.*: 76.5 liters

FIELD PARAMETERS

Purge Time	Volume Removed: Liters	Volume Removed: Casing Volumes	Pumping Rate	Temp °C	Conductivity (mS/cm)	pH	Turbidity (NTU)	ORP	DO	Odor	DTW	Comments
Verify Calibration			(ltr/min)	(+/-1 °C)	(+/- 3%)	(+/- 0.1)	NA	(+/- 10%)	(+/- 10% or if <1, 0.3)	(Y/N)	ft	
0845	–	–	.3	18.4	69.3	7.49	8.7	70	3.62	N	4.63	
0850	1.5	.05	.3	18.4	67.5	7.57	3.1	66	2.15	N	4.82	
0855	3.0	.10	.3	18.4	67.3	7.51	2.4	57	1.95	N	4.95	
0900	4.5	.15	.3	18.4	66.5	7.57	13.3	45	1.84	N	5.14	
0905	6.0	.20	.3	18.5	66.5	7.68	5.2	37	1.82	N	5.19	
0910	7.5	.25	.3	18.6	66.2	7.84	2.7	26	1.83	N	5.26	
0915	9.0	.30	.3	18.6	66.0	7.84	3.0	20	1.84	N	5.32	
0920	10.5	.35	.3	18.6	65.6	7.86	3.6	-5	1.82	N	5.37	Stabilized
Previous Log readings												

Sample Date: 6.6.08 **Sample Start Time:** 0920 **Sample End Time:** 0921 **Equipment Blank Collected:** N/A **Trip Blank Collected:** TB2-A7459

Pump Collected With: Peristaltic **Volatile Sample Flow Rate:** 100 mL/min

1/day/team when portable pump (or other non disposable reusable equipment) is used

Complete a Collected Sample Form for each blank collected.

Final Depth to Water 5.40 **MS/MSD** [ ]

COLLECTED SAMPLE INFORMATION

Ice + Preservative	HCL	NA	HCL	NA	NA	NA	NA	NA	HNO_3	NA	NaOH	---	---	NaOH+ zinc acetate	HNO_3	HNO_3	NA	HNO_3	HNO_3	HNO_3	HNO_3	NA	NA	NA
WELL ID & SAMPLE TYPE	VOCs	Methane, ethane, ethene	TPH-p as gasoline	TPH-e as diesel, jet fuel, MO	SVOCs	PAHs	Pesticides	PCBs	Dissolved Metals	Hexavalent Chromium	Cyanide	Nitrate, Nitrite, Chloride, Sulfate	Alkalinity	Sulfide	Gross Alpha & Beta	Radium	Tritium Isotopes	Radium-228 Isotopes	Radioactive Strontium	Gamma Emitting Radionuclides	Uranium Isotopes	1,4-Dioxane	Ferrous Iron	TDS
Number of Containers	3	2	2	2	1	2	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1	2	1	1
Sample Container	40 ml V	40 ml V	40 ml V	0.5 L A	1 L A	1 L A	1 L A	1 L A	0.5 L PE	0.25 L	0.5 L PE	0.25 L PE	0.25 L PE	0.5 L PE	1 L PE	1 L PE	0.25 L A	1 L PE	1 L PE	1 L PE	1 L PE	1 L A	0.1 L PE	0.25 L PE
MW-02-A7442 NS	X																							

The order of sample collection above is from left to right. Samples for metals are filtered

Comments:

3 Bottles

Sampler: CS/JS

IR Site 32

ALAMEDA PURGE LOG AND SAMPLE COLLECTION FORM

Event: Summer 2008

Purge Date: 6-6-08

Well Number: **MW-03**

Weather: Sunny, Cloudy, Rain, Windy, Hot **Temperature:** 65° F **Sample Team:** ☐ Team 1 ☒ Team 2 ☐ Team 3

Personal Air Monitoring:	Meter ID#	Results
PID:		Ø
LEL:	min'zed	Ø
O2:	zero	20.9

Measured Well Depth: 15.00 ft.
Depth to Water (DTW): 7.18 ft.
Calculated height of water in well (T=Well Depth - Depth to Water): 7.82 ft.

One Casing Volume*: [T x (vol/ft) x 3.785]: .653 20 liters
Casing Diameter (D): D (see chart) 4" inch
Verified Depth to Water: 7.18 ft.
Field calculated -- 1 casing vol.*: 20 liters
Field calculated -- 3 casing vol.*: 60 liters

FIELD PARAMETERS

Purge Time	Volume Removed: Liters	Volume Removed: Casing Volumes	Volume Removed: Pumping Rate	Temp °C	Conductivity (mS/cm)	pH	Turbidity (NTU)	ORP	DO	Odor	DTW	Comments
Verify Calibration			(ltr/min)	(+/-1 °C)	(+/-3%)	(+/-0.1)	NA	(+/-10%)	(+/-10% or if <1, 0.3)	(Y/N)	ft	
1035	–	–	.3	19.9	.108	7.58	615	-84	6.95	N	7.34	
1040	1.5	.07	.3	20.1	.100	7.19	389	-76	6.62	N	7.32	
1045	3.0	.14	.3	20.0	.101	7.21	237	-79	6.52	N	7.32	
1050	4.5	.21	.3	20.0	.099	7.36	210	-82	6.19	N	7.32	
1055	6.0	.28	.3	19.9	.099	7.41	196	-92	5.74	N	7.32	
1100	7.5	.35	.3	20.1	.092	7.41	155	-90	5.32	N	7.32	
1105	9.0	.42	.3	20.1	.092	7.42	137	-90	5.27	N	7.33	
1110	10.5	.49	.3	20.2	.091	7.45	122	-90	5.27	N	7.32	Stabilized
Previous Log readings												

Sample Date: 6-6-08 **Sample Start Time:** 1110 **Sample End Time:** 1120 **Equipment Blank Collected:** N/A **Trip Blank Collected:** 702-A7459

Pump Collected With: Peristaltic **Volatile Sample Flow Rate:** 100 mL/min

1/day/team when portable pump (or other non disposable reusable equipment) is used

Complete a Collected Sample Form for each blank collected.

Final Depth to Water 7.32 **MS/MSD** ☐

COLLECTED SAMPLE INFORMATION

	Ice + Preservative	HCL	NA	HCL	NA	NA	NA	NA	NA	HNO_3	NA	NaOH	--	--	NaOH+ zinc acetate	HNO_3	HNO_3	NA	HNO_3	HNO_3	HNO_3	HNO_3	NA	NA	NA
	WELL ID & SAMPLE TYPE	VOCs	Methane, ethane, ethene	TPH-p as gasoline	TPH-e as diesel, jet fuel, MO	SVOCs	PAHs	Pesticides	PCBs	Dissolved Metals	Hexavalent Chromium	Cyanide	Nitrate, Nitrite, Chloride, Sulfate	Alkalinity	Sulfide	Gross Alpha & Beta	Radium	Tritium Isotopes	Radium-226 Isotopes	Radioactive Strontium	Gamma Emitting Radionuclides	Uranium Isotopes	1,4-Dioxane	Ferrous Iron	TDS
	Number of Containers	3	2	2	2	1	2	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1	2	1	1
	Sample Container	40 ml V	40 ml V	40 ml V	0.5 L A	1 L A	1 L A	1 L A	1 L A	0.5 L PE	0.25 L	0.5 L PE	0.25 L PE	0.25 L PE	0.5 L PE	1 L PE	1 L PE	0.25 L A	1 L PE	1 L PE	1 L PE	1 L PE	1 L A	0.1 L PE	0.25 L PE
MW-03-A7443	NS 1110	X																							
MW-03-A7444	FD 1115	X																							

The order of sample collection above is from left to right. Samples for metals are filtered

Comments:

6 Bottles

Sampler: CS/JS

IR Site 32

ALAMEDA PURGE LOG AND SAMPLE COLLECTION FORM

Event: Summer 2008

Purge Date: 6/16/08

Well Number: **MW-04**

Weather: Sunny, Cloudy, Rain, Windy, Hot **Temperature:** 62° **Sample Team:** ☐ Team 1 ☒ Team 2 ☐ Team 3

Personal Air Monitoring	Meter ID#	Results
PID:	Rae	0
LEL:	Rae	0
02:	min 2	20.9

Measured Well Depth: 15.00 ft.
Depth to Water (DTW): 3.77 ft.
Calculated height of water in well (T=Well Depth - Depth to Water): 11.23 ft.

One Casing Volume= [Π x (vol/ft) x 3.785]: .653 27 liters
Casing Diameter (D): 4" D (see chart) inch
Verified Depth to Water: 3.77 ft.
Field calculated -- 1 casing vol.:* 27 liters
Field calculated -- 3 casing vol.*: 81 liters

FIELD PARAMETERS

Purge Time	Volume Removed: Liters	Volume Removed: Casing Volumes	Volume Removed: Pumping Rate	Temp °C	Conductivity (mS/cm)	pH	Turbidity (NTU)	ORP	DO	Odor	DTW	Comments
Verify Calibration			(ltr/min)	(+/-1 °C)	(+/-3%)	(+/-0.1)	NA	(+/-10%)	(+/-10% or if <1, 0.3)	(Y/N)	ft	
0755	-	-	3	17.9	.164	7.30	5.9	-176	4.30	N	3.82	
0800	1.5	.05	3	17.9	.156	7.77	4.1	-196	2.19	N	3.82	
0805	3.0	.10	3	17.9	.149	7.91	3.0	-203	1.81	N	3.82	
0810	4.5	.15	3	16.0	.145	7.93	5.0	-207	1.77	N	3.82	
0815	6.0	.20	3	16.0	.145	7.92	1.6	-199	1.72	N	3.82	
0820	7.5	.25	3	16.0	.145	7.91	2.3	-197	1.70	N	3.82	Stabilized
Previous Log readings												

Sample Date: 6/16/08 **Sample Start Time:** 0820 **Sample End Time:** 0821 **Equipment Blank Collected:** N/A **Trip Blank Collected:** TB-A7459

Pump Collected With: Peristaltic **Volatile Sample Flow Rate:** 100 mL/min

1/day/team when portable pump (or other non disposable reusable equipment) is used

Complete a Collected Sample Form for each blank collected

Final Depth to Water 3.82 **MS/MSD** ☐

COLLECTED SAMPLE INFORMATION

	Ice + Preservative	HCL	NA	HCL	NA	NA	NA	NA	NA	HNO_3	NA	NaOH	---	---	NaOH+ zinc acetate	HNO_3	HNO_3	NA	HNO_3	HNO_3	HNO_3	HNO_3	NA	NA	NA
	WELL ID & SAMPLE TYPE	VOCs	Methane, ethane, ethene	TPH-p as gasoline	TPH-e as diesel, jet fuel, MO	SVOCs	PAHs	Pesticides	PCBs	Dissolved Metals	Hexavalent Chromium	Cyanide	Nitrate, Nitrite, Chloride, Sulfate	Alkalinity	Sulfide	Gross Alpha & Beta	Radium	Tritium Isotopes	Radium-228 Isotopes	Radioactive Strontium	Gamma Emitting Radionuclides	Uranium Isotopes	1,4-Dioxane	Ferrous Iron	TDS
	Number of Containers	3	2	2	2	1	2	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1	2	1	1
	Sample Container	40 ml V	40 ml V	40 ml V	0.5 L A	1 L A	1 L A	1 L A	1 L A	0.5 L PE	0.25 L	0.5 L PE	0.25 L PE	0.25 L PE	0.5 L PE	1 L PE	1 L PE	0.25 L A	1 L PE	1 L PE	1 L PE	1 L PE	1 L A	0.1 L PE	0.25 L PE
MW-04-A7445	NS	X																							

The order of sample collection above is from left to right. Samples for metals are filtered

Comments:

3 Bottles

Sampler: CS/JS

IR Site 32

ALAMEDA PURGE LOG AND SAMPLE COLLECTION FORM

Event: Summer 2008

Purge Date: 6.6.08

Well Number: **MW-05**

Weather: Sunny, Cloudy, Rain, Windy, Hot **Temperature:** 70 **Sample Team:** ☐ Team 1 ☒ Team 2 ☐ Team 3

Personal Air Monitoring	Meter ID#	Results
PID:	mini Rae	ϕ
LEL:	yes	ϕ
02:		20.9

Measured Well Depth: 15.00 ft.

Depth to Water (DTW): 3.17 ft.

Calculated height of water in well (T=Well Depth - Depth to Water): 11.83 ft.

One Casing Volume= [T x (vol/ft) x 3.785]: .653 30 liters

Casing Diameter (D): D (see chart) 4" inch

Verified Depth to Water: 3.17 ft.

Field calculated -- 1 casing vol.*: 30 liters

Field calculated -- 3 casing vol.*: 90 liters

FIELD PARAMETERS

Purge Time	Volume Removed: Liters	Volume Removed: Casing Volumes	Pumping Rate	Temp °C	Conductivity (mS/cm)	pH	Turbidity (NTU)	ORP	DO	Odor	DTW	Comments
Verify Calibration			(ltr/min)	(+/-1 °C)	(+/- 3%)	(+/- 0.1)	NA	(+/- 10%)	(+/- 10% or if <1, 0.3)	(Y/N)	ft	
1250	—	—	.3	20.0	.118	8.12	45.9	-57	9.37	N	3.34	
1255	1.5	.05	.3	20.2	.103	8.03	28.8	-90	3.53	N	3.39	
1300	3.0	.10	.3	20.0	.100	8.07	11.1	-119	2.62	N	3.42	
1305	4.5	.15	.3	20.0	.096	8.08	6.0	-130	2.29	N	3.42	
1310	6.0	.20	.3	20.0	.096	8.08	5.9	-132	2.20	N	3.42	
1315	7.5	.25	.3	19.9	.094	8.09	8.7	-137	2.13	N	3.42	Stabilized
Previous Log readings												

Sample Date: 6.6.08 **Sample Start Time:** 1315 **Sample End Time:** 1317 **Equipment Blank Collected:** N/A **Trip Blank Collected:** TB2-A7459

Pump Collected With: Peristaltic **Volatile Sample Flow Rate:** 100 mL/min

1/day/team when portable pump (or other non disposable reusable equipment) is used

Complete a Collected Sample Form for each blank collected.

Final Depth to Water 3.42 **MS/MSD** ☐

COLLECTED SAMPLE INFORMATION

WELL ID & SAMPLE TYPE	VOCs	Methane, ethane, ethene	TPH-p as gasoline	TPH-e as diesel, jet fuel, MO	SVOCs	PAHs	Pesticides	PCBs	Dissolved Metals	Hexavalent Chromium	Cyanide	Nitrate, Nitrite, Chloride, Sulfate	Alkalinity	Sulfide	Gross Alpha & Beta	Radium	Tritium Isotopes	Radium-228 Isotopes	Radioactive Strontium	Gamma Emitting Radionuclides	Uranium Isotopes	1,4-Dioxane	Ferrous Iron	TDS
Ice + Preservative	HCL	NA	HCL	NA	NA	NA	NA	NA	HNO_3	NA	NaOH	---	---	NaOH+ zinc acetate	HNO_3	HNO_3	NA	HNO_3	HNO_3	HNO_3	HNO_3	NA	NA	NA
Number of Containers	3	2	2	2	1	2	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1	2	1	1
Sample Container	40 ml V	40 ml V	40 ml V	0.5 L A	1 L A	1 L A	1 L A	1 L A	0.5 L PE	0.25 L	0.5 L PE	0.25 L PE	0.25 L PE	0.5 L PE	1 L PE	1 L PE	0.25 L A	1 L PE	1 L PE	1 L PE	1 L PE	1 L A	0.1 L PE	0.25 L PE
MW-05-A7446 NS	X																							

The order of sample collection above is from left to right. Samples for metals are filtered

Comments:

3 Bottles

Sampler: CS/JS

Innovative Technical Solutions, Inc.
2730 Shadelands Drive, Suite 100
Walnut Creek, California 94598
(925) 946-3100 (Tel)
(925) 256-8998 (Fax)

CHAIN OF CUSTODY

PROJECT NAME: **Alameda Basewide Groundwater Monitoring (QTR 20)**
PROJECT NUMBER: **07033.0015**
CONTACT NAME: **Teresa Ruha (925) 525-8210**

SAMPLE MATRIX: **Water**
EVENT: **Summer 2008**
LAB NAME: **Curtis & Tompkins**

COC: 6960
Page: 1 of 1

ANALYSIS

FIELD SAMPLE ID: INFORMATION	DATE	TIME	VOCs	Methane, ethane, ethene	TPH-p as gasoline	TPH-e as diesel, jet fuel, MO	SVOCs	PAHs	Pesticides	PCBs	Dissolved Metals	Hexavalent Chromium	Cyanide	Nitrate, Nitrite, Chloride, Sulfate	Alkalinity	Sulfide	Gross Alpha & Beta	Radium	Tritium Isotopes	Radium-228 Isotopes	Radioactive Strontium	Gamma Emitting Radionuclides	Uranium Isotopes	1,4-Dioxane	Ferrous Iron	TDS	COMMENTS (Check if MS/MSD requires Double Volume)
Number of Container			3	2	2	2	1	2	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1	2	1	1	
Sample Container			40 ml V	40 ml V	40 ml V	0.5 L A	1 L A	1 L A	1 L A	1 L A	0.5 L PE	0.5 L PE	0.5 L PE	0.25 L PE	0.25 L PE	0.5 L PE	1 L PE	1 L PE	250 mL A	1 L PE	1 L PE	1 L PE	1 L PE	1 L A	100 ml V	250 mL PE	
Preservative			HCL	HCL	HCL	NA	NA	NA	NA	NA	HNO_3	NA	NaOH	--	--	NaOH+ Za Ac	HNO_3	HNO_3	NA	HNO_3	HNO_3	HNO_3	HNO_3	HCL	NA	NA	
TB2-A7459	6/6/08	0700	X																								
MW-04-A7445	6/6/08	0820	X																								
MW-02-A7442	6/6/08	0920	X																								
★ MW-01-A7441	6/6/08	1015	X																								
MW-03-A7443	6/6/08	1110	X																								
MW-03-A7444	6/6/08	1115	X																								
MW-05-A7446	6/6/08	1315	X																								

SAMPLED BY: CS/JS
SIGNATURE: [signature]
RELINQUISHED BY: Chad Simpson [signature]
Printed Name Signature
ITSI 6.6.08
Company Date and Time

SPECIAL INSTRUCTIONS/COMMENTS:
★ No HCL Preservative

RELINQUISHED BY:
Printed Name Signature
Company Date and Time

RECEIVED BY:
Printed Name Signature

RECEIVED BY:
Printed Name Signature

Innovative Technical Solutions, Inc.

APPENDIX 2

LABORATORY ANALYTICAL REPORT AND
CHAIN-OF-CUSTODY

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 203802
ANALYTICAL REPORT

Innovative Technical Solutions, Inc. 2730 Shadelands Drive Walnut Creek, CA 94598	Project : ALAMEDA Location : Alameda Basewide Level : III

Sample ID	Lab ID
OU2B-MW01-A7400	203802-001
OU2B-MW02-A7401	203802-002
TB2-A7459	203802-003
MW-04-A7445	203802-004
MW-02-A7442	203802-005
MW-01-A7441	203802-006
MW-03-A7443	203802-007
MW-03-A7444	203802-008
MW-05-A7446	203802-009

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 06/20/2008
Project Manager

Signature: _____ Date: 06/23/2008
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**203802**
Client:	**Innovative Technical Solutions,Inc.**
Project:	**ALAMEDA**
Location:	**Alameda Basewide**
Request Date:	**06/06/08**
Samples Received:	**06/06/08**

This hardcopy data package contains sample and QC results for nine water samples, requested for the above referenced project on 06/06/08. See attached cooler receipt form for any sample receipt problems or discrepancies.

Volatile Organics by GC/MS (EPA 8260B):

Low response was observed for Freon 12 in the ICV analyzed 05/09/08 00:21; this analyte was not detected at or above the RL in the associated samples.

Low response was observed for acetone in the CCV analyzed 06/09/08 12:27; this analyte met minimum response criteria, and affected data was qualified with "b". High response was observed for hexachlorobutadiene; this analyte was not detected at or above the RL in the associated samples.

Naphthalene, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene were detected between the MDL and the RL in the method blank for batch 139050; these analytes were not detected in samples at or above the RL.

MW-01-A7441 (lab # 203802-006) had pH greater than 2. This sample was analyzed within the 7 day holding time for unpreserved samples

No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A):

Low recovery was observed for magnesium in the MS for batch 139052; the parent sample was not a project sample, and the associated RPD was within limits.

Responses exceeding the instrument's linear range were observed for manganese in the MS/MSD for batch 139052.

Many analytes were detected between the MDL and the RL in the method blank for batch 139052.

No other analytical problems were encountered.

Chain of Custody

203802

Innovative Technical Solutions, Inc.
2730 Shadelands Drive, Suite 100
Walnut Creek, California 94598
(925) 946-3100 (Tel)
(925) 256-8998 (Fax)

CHAIN OF CUSTODY

PROJECT NAME: **Alameda Basewide Groundwater Monitoring (QTR 20)**
PROJECT NUMBER: **07033.0015**
CONTACT NAME: **Teresa Ruha (925) 525-8210**

SAMPLE MATRIX: **Water**
EVENT: **Summer 2008**
LAB NAME: **Curtis & Tompkins**

COC: **6901**
Page: 1 of 1

ANALYSIS

FIELD SAMPLE ID: INFORMATION	DATE	TIME	VOCs	Methane, ethane, ethene	TPH-p as gasoline	TPH-e as diesel, jet fuel, MO	SVOCs	PAHs	Pesticides	PCBs	Dissolved Metals	Hexavalent Chromium	Cyanide	Nitrate, Nitrite, Chloride, Sulfate	Alkalinity	Sulfide	Gross Alpha & Beta	Radium	Tritium Isotopes	Radium-228 Isotopes	Radioactive Strontium	Gamma Emitting Radionuclides	Uranium Isotopes	1,4-Dioxane	Ferrous Iron	TDS	COMMENTS (Check if MS/MSD requires Double Volume)
Number of Container			3	2	2	2	1	2	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1	2	1	1	
Sample Container			40 ml V	40 ml V	40 ml V	0.5 L A	1 L A	1 L A	1 L A	1 L A	0.5 L PE	0.5 L PE	0.5 L PE	0.25 L PE	0.25 L PE	0.5 L PE	1 L PE	1 L PE	250 mL A	1 L PE	1 L PE	1 L PE	1 L PE	1 L A	100 ml V	250 mL PE	
Preservative			HCL	HCL	HCL	NA	NA	NA	NA	NA	HNO_3	NA	NaOH	---	---	NaOH+ Zn AC	HNO_3	HNO_3	NA	HNO_3	HNO_3	HNO_3	HNO_3	HCL	NA	NA	
OU2B-MW01-A7400	6/5/08	1345									X																

SAMPLED BY: CS/JS
SIGNATURE: [signature]
RELINQUISHED BY: Chad Simpson [signature]
Printed Name Signature
TTSI 6.5.08 / 1540
Company Date and Time
RECEIVED BY: Ling Wu [signature]
Printed Name Signature

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY: _____
Printed Name Signature
_____
Company Date and Time
RECEIVED BY: _____
Printed Name Signature

Standard, on ice, intact

20380

Innovative Technical Solutions, Inc.
2730 Shadelands Drive, Suite 100
Walnut Creek, California 94598
(925) 946-3100 (Tel)
(925) 256-8998 (Fax)

CHAIN OF CUSTODY

PROJECT NAME: **Alameda Basewide Groundwater Monitoring (QTR 20)**
PROJECT NUMBER: **07033.0015**
CONTACT NAME: **Teresa Ruha (925) 525-8210**

SAMPLE MATRIX: **Water**
EVENT: **Summer 2008**
LAB NAME: **Curtis & Tompkins**

COC: **6902**
Page: 1 of 1

ANALYSIS

FIELD SAMPLE ID: INFORMATION	DATE	TIME	VOCs	Methane, ethane, ethene	TPH-p as gasoline	TPH-e as diesel, jet fuel, MO	SVOCs	PAHs	Pesticides	PCBs	Dissolved Metals	Hexavalent Chromium	Cyanide	Nitrate, Nitrite, Chloride, Sulfate	Alkalinity	Sulfide	Gross Alpha & Beta	Radium	Tritium Isotopes	Radium-228 Isotopes	Radioactive Strontium	Gamma Emitting Radionuclides	Uranium Isotopes	1,4-Dioxane	Ferrous Iron	TDS	COMMENTS (Check if MS/MSD requires Double Volume)
Number of Container			3	2	2	2	1	2	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1	2	1	1	
Sample Container			40 ml V	40 ml V	40 ml V	0.5 L A	1 L A	1 L A	1 L A	1 L A	0.5 L PE	0.5 L PE	0.5 L PE	0.25 L PE	0.25 L PE	0.5 L PE	1 L PE	1 L PE	250 mL A	1 L PE	1 L PE	1 L PE	1 L PE	1 L A	100 ml V	250 mL PE	
Preservative			HCL	HCL	HCL	NA	NA	NA	NA	NA	HNO_3	NA	NaOH	---	---	NaOH+ Zn AC	HNO_3	HNO_3	NA	HNO_3	HNO_3	HNO_3	HNO_3	HCL	NA	NA	
2 OU2B-MW02-A7401	6/5/08	1250									X																

SAMPLED BY: C.S / J.S
SIGNATURE: C W S

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY: Chad Simpson (Printed Name) — C W S (Signature)
ITSI (Company) — 6/5/08 / 1540 (Date and Time)

RECEIVED BY: Ling Wu (Printed Name) — (Signature)

RELINQUISHED BY: (Printed Name) (Signature)
(Company) (Date and Time)

RECEIVED BY: (Printed Name) (Signature)

Standard, on ice, intact

203802

Innovative Technical Solutions, Inc.
2730 Shadelands Drive, Suite 100
Walnut Creek, California 94598
(925) 946-3100 (Tel)
(925) 256-8998 (Fax)

CHAIN OF CUSTODY

PROJECT NAME: **Alameda Basewide Groundwater Monitoring (QTR 20)**
PROJECT NUMBER: **07033.0015**
CONTACT NAME: **Teresa Ruha (925) 525-8210**

SAMPLE MATRIX: **Water**
EVENT: **Summer 2008**
LAB NAME: **Curtis & Tompkins**

COC: **6960**
Page: 1 of 1

ANALYSIS

FIELD SAMPLE ID: INFORMATION	DATE	TIME	VOCs	Methane, ethane, ethene	TPH-p as gasoline	TPH-e as diesel, jet fuel, MO	SVOCs	PAHs	Pesticides	PCBs	Dissolved Metals	Hexavalent Chromium	Cyanide	Nitrate, Nitrite, Chloride, Sulfate	Alkalinity	Sulfide	Gross Alpha & Beta	Radium	Tritium Isotopes	Radium-228 Isotopes	Radioactive Strontium	Gamma Emitting Radionuclides	Uranium Isotopes	1,4-Dioxane	Ferrous Iron	TDS	COMMENTS (Check if MS/MSD requires Double Volume)
Number of Container			3	2	2	2	1	2	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1	2	1	1	
Sample Container			40 ml V	40 ml V	40 ml V	0.5 L A	1 L A	1 L A	1 L A	1 L A	0.5 L PE	0.5 L PE	0.5 L PE	0.25 L PE	0.25 L PE	0.5 L PE	1 L PE	1 L PE	250 mL A	1 L PE	1 L PE	1 L PE	1 L PE	1 L A	100 ml V	250 mL PE	
Preservative			HCL	HCL	HCL	NA	NA	NA	NA	NA	HNO_3	NA	NaOH	---	---	NaOH+ Zn Ac	HNO_3	HNO_3	NA	HNO_3	HNO_3	HNO_3	HNO_3	HCL	NA	NA	
3 TB2-A7459	6/6/08	0700	X																								
3 MW-04-A7445	6/6/08	0820	X																								
4 MW-02-A7442	6/6/08	0920	X																								
5 MW-01-A7441	6/6/08	1015	X																								
6 MW-03-A7443	6/6/08	1110	X																								
7 MW-03-A7444	6/6/08	1115	X																								
8 MW-05-A7446	6/6/08	1315	X																								

SAMPLED BY: CS/JS
SIGNATURE: [signature]

SPECIAL INSTRUCTIONS/COMMENTS:
★ No HCL Preservative

RELINQUISHED BY: Chad Simpson [signature]
Printed Name Signature
ITSI 6.6.08/1540
Company Date and Time

RELINQUISHED BY:
Printed Name Signature
Company Date and Time

RECEIVED BY: Ling Wu [signature]
Printed Name Signature

RECEIVED BY:
Printed Name Signature

standard, on ice, intact

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 203802 Date Received 6-6-08 Number of coolers 1
Client ITSI Project Alameda

Date Opened 6-6-08 By (print) F Nichols (sign) [signature]
Date Logged in_____ By (print)_____ (sign)_____

1. Did cooler come with a shipping slip (airbill, etc)?..... YES (NO)
   Shipping info_____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name_____ Date_____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received?..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)?..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form)..... (YES) NO
6. Indicate the packing in cooler: (if other, describe)_____

   ☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None

   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. If required, was sufficient ice used? Samples should be < or = 6°C ..... (YES) NO N/A

   Type of ice used: ☒ Wet ☐ Blue ☐ None Temp(°C) 5.5°

   ☐ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer?_____
9. Did all bottles arrive unbroken/unopened?..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... YES (NO) N/A
15. Are bubbles > 6mm absent in VOA samples?..... (YES) NO N/A
16. Was the client contacted concerning this sample delivery?..... YES NO
   If YES, Who was called?_____ By_____ Date:_____

COMMENTS
* 3 Voas for sample "MW-01-A7441" arrived unpreserved.

8260 Results & QC Summary
Water

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Field ID:	TB2-A7459	Batch#:	139050
Lab ID:	203802-003	Sampled:	06/06/08
Matrix:	Water	Received:	06/06/08
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
tert-Butyl Alcohol (TBA)	ND	10	0.9
Chloromethane	ND	1.0	0.2
Vinyl Chloride	ND	0.5	0.1
Isopropyl Ether (DIPE)	ND	0.5	0.07
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Methyl tert-Amyl Ether (TAME)	ND	0.5	0.09
Trichlorofluoromethane	ND	1.0	0.1
Acetone	0.3 J b	10	0.2
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.06
MTBE	ND	0.5	0.09
trans-1,2-Dichloroethene	ND	0.5	0.2
1,1-Dichloroethane	ND	0.5	0.08
2-Butanone	ND	10	0.1
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.09
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.05
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.07
Toluene	ND	0.5	0.08
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.1
1,3-Dichloropropane	ND	0.5	0.08
Tetrachloroethene	ND	0.5	0.2
Dibromochloromethane	ND	0.5	0.09
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.09
1,1,1,2-Tetrachloroethane	ND	0.5	0.07
Ethylbenzene	ND	0.5	0.2
m,p-Xylenes	ND	0.5	0.07
o-Xylene	ND	0.5	0.09
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.2
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.09
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.2
Bromobenzene	ND	0.5	0.04

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Field ID:	TB2-A7459	Batch#:	139050
Lab ID:	203802-003	Sampled:	06/06/08
Matrix:	Water	Received:	06/06/08
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	0.5	0.2
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.2
sec-Butylbenzene	ND	0.5	0.2
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.2
1,2-Dichlorobenzene	ND	0.5	0.2
1,2-Dibromo-3-Chloropropane	ND	2.0	0.4
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	0.5	0.2
Naphthalene	0.2 J	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-123
1,2-Dichloroethane-d4	89	76-138
Toluene-d8	93	80-120
Bromofluorobenzene	111	80-120

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Field ID:	MW-04-A7445	Batch#:	139050
Lab ID:	203802-004	Sampled:	06/06/08
Matrix:	Water	Received:	06/06/08
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
tert-Butyl Alcohol (TBA)	ND	10	0.9
Chloromethane	ND	1.0	0.2
Vinyl Chloride	2.1	0.5	0.1
Isopropyl Ether (DIPE)	ND	0.5	0.07
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Methyl tert-Amyl Ether (TAME)	ND	0.5	0.09
Trichlorofluoromethane	ND	1.0	0.1
Acetone	0.5 J b	10	0.2
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.06
MTBE	ND	0.5	0.09
trans-1,2-Dichloroethene	ND	0.5	0.2
1,1-Dichloroethane	ND	0.5	0.08
2-Butanone	ND	10	0.1
cis-1,2-Dichloroethene	1.0	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.09
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.05
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.07
Toluene	0.1 J	0.5	0.08
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.1
1,3-Dichloropropane	ND	0.5	0.08
Tetrachloroethene	ND	0.5	0.2
Dibromochloromethane	ND	0.5	0.09
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	16	0.5	0.09
1,1,1,2-Tetrachloroethane	ND	0.5	0.07
Ethylbenzene	ND	0.5	0.2
m,p-Xylenes	0.09 J	0.5	0.07
o-Xylene	ND	0.5	0.09
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.2
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.09
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.2
Bromobenzene	ND	0.5	0.04

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Field ID:	MW-04-A7445	Batch#:	139050
Lab ID:	203802-004	Sampled:	06/06/08
Matrix:	Water	Received:	06/06/08
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	0.5	0.2
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.2
sec-Butylbenzene	ND	0.5	0.2
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.2
1,2-Dichlorobenzene	ND	0.5	0.2
1,2-Dibromo-3-Chloropropane	ND	2.0	0.4
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	0.5	0.2
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-123
1,2-Dichloroethane-d4	89	76-138
Toluene-d8	93	80-120
Bromofluorobenzene	112	80-120

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Field ID:	MW-02-A7442	Batch#:	139050
Lab ID:	203802-005	Sampled:	06/06/08
Matrix:	Water	Received:	06/06/08
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
tert-Butyl Alcohol (TBA)	ND	10	0.9
Chloromethane	ND	1.0	0.2
Vinyl Chloride	2.2	0.5	0.1
Isopropyl Ether (DIPE)	ND	0.5	0.07
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Methyl tert-Amyl Ether (TAME)	ND	0.5	0.09
Trichlorofluoromethane	ND	1.0	0.1
Acetone	0.3 J b	10	0.2
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.06
MTBE	ND	0.5	0.09
trans-1,2-Dichloroethene	0.6	0.5	0.2
1,1-Dichloroethane	ND	0.5	0.08
2-Butanone	0.3 J	10	0.1
cis-1,2-Dichloroethene	10	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.09
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	0.4 J	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.05
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.07
Toluene	ND	0.5	0.08
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.1
1,3-Dichloropropane	ND	0.5	0.08
Tetrachloroethene	ND	0.5	0.2
Dibromochloromethane	ND	0.5	0.09
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.09
1,1,1,2-Tetrachloroethane	ND	0.5	0.07
Ethylbenzene	ND	0.5	0.2
m,p-Xylenes	ND	0.5	0.07
o-Xylene	ND	0.5	0.09
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.2
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.09
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.2
Bromobenzene	ND	0.5	0.04

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Field ID:	MW-02-A7442	Batch#:	139050
Lab ID:	203802-005	Sampled:	06/06/08
Matrix:	Water	Received:	06/06/08
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	0.5	0.2
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.2
sec-Butylbenzene	ND	0.5	0.2
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.2
1,2-Dichlorobenzene	ND	0.5	0.2
1,2-Dibromo-3-Chloropropane	ND	2.0	0.4
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	0.5	0.2
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-123
1,2-Dichloroethane-d4	90	76-138
Toluene-d8	93	80-120
Bromofluorobenzene	113	80-120

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Field ID:	MW-01-A7441	Batch#:	139050
Lab ID:	203802-006	Sampled:	06/06/08
Matrix:	Water	Received:	06/06/08
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
tert-Butyl Alcohol (TBA)	15	10	0.9
Chloromethane	ND	1.0	0.2
Vinyl Chloride	ND	0.5	0.1
Isopropyl Ether (DIPE)	0.1 J	0.5	0.07
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Methyl tert-Amyl Ether (TAME)	ND	0.5	0.09
Trichlorofluoromethane	ND	1.0	0.1
Acetone	0.5 J b	10	0.2
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.06
MTBE	ND	0.5	0.09
trans-1,2-Dichloroethene	ND	0.5	0.2
1,1-Dichloroethane	ND	0.5	0.08
2-Butanone	ND	10	0.1
cis-1,2-Dichloroethene	0.2 J	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.09
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.05
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	0.8 J	10	0.07
Toluene	ND	0.5	0.08
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.1
1,3-Dichloropropane	ND	0.5	0.08
Tetrachloroethene	ND	0.5	0.2
Dibromochloromethane	ND	0.5	0.09
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.09
1,1,1,2-Tetrachloroethane	ND	0.5	0.07
Ethylbenzene	ND	0.5	0.2
m,p-Xylenes	ND	0.5	0.07
o-Xylene	ND	0.5	0.09
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.2
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.09
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.2
Bromobenzene	ND	0.5	0.04

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Field ID:	MW-01-A7441	Batch#:	139050
Lab ID:	203802-006	Sampled:	06/06/08
Matrix:	Water	Received:	06/06/08
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	0.5	0.2
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.2
sec-Butylbenzene	ND	0.5	0.2
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.2
1,2-Dichlorobenzene	ND	0.5	0.2
1,2-Dibromo-3-Chloropropane	ND	2.0	0.4
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	0.5	0.2
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	90	76-138
Toluene-d8	91	80-120
Bromofluorobenzene	116	80-120

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Field ID:	MW-03-A7443	Batch#:	139050
Lab ID:	203802-007	Sampled:	06/06/08
Matrix:	Water	Received:	06/06/08
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
tert-Butyl Alcohol (TBA)	ND	10	0.9
Chloromethane	ND	1.0	0.2
Vinyl Chloride	ND	0.5	0.1
Isopropyl Ether (DIPE)	ND	0.5	0.07
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Methyl tert-Amyl Ether (TAME)	ND	0.5	0.09
Trichlorofluoromethane	ND	1.0	0.1
Acetone	0.5 J b	10	0.2
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.06
MTBE	ND	0.5	0.09
trans-1,2-Dichloroethene	7.8	0.5	0.2
1,1-Dichloroethane	ND	0.5	0.08
2-Butanone	ND	10	0.1
cis-1,2-Dichloroethene	17	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.09
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	0.2 J	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	3.6	0.5	0.05
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.07
Toluene	ND	0.5	0.08
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.1
1,3-Dichloropropane	ND	0.5	0.08
Tetrachloroethene	ND	0.5	0.2
Dibromochloromethane	ND	0.5	0.09
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.09
1,1,1,2-Tetrachloroethane	ND	0.5	0.07
Ethylbenzene	ND	0.5	0.2
m,p-Xylenes	ND	0.5	0.07
o-Xylene	ND	0.5	0.09
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.2
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.09
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.2
Bromobenzene	ND	0.5	0.04

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Field ID:	MW-03-A7443	Batch#:	139050
Lab ID:	203802-007	Sampled:	06/06/08
Matrix:	Water	Received:	06/06/08
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	0.5	0.2
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.2
sec-Butylbenzene	ND	0.5	0.2
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.2
1,2-Dichlorobenzene	ND	0.5	0.2
1,2-Dibromo-3-Chloropropane	ND	2.0	0.4
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	0.5	0.2
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	88	76-138
Toluene-d8	94	80-120
Bromofluorobenzene	116	80-120

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Field ID:	MW-03-A7444	Batch#:	139050
Lab ID:	203802-008	Sampled:	06/06/08
Matrix:	Water	Received:	06/06/08
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
tert-Butyl Alcohol (TBA)	ND	10	0.9
Chloromethane	ND	1.0	0.2
Vinyl Chloride	ND	0.5	0.1
Isopropyl Ether (DIPE)	ND	0.5	0.07
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Methyl tert-Amyl Ether (TAME)	ND	0.5	0.09
Trichlorofluoromethane	ND	1.0	0.1
Acetone	0.8 J b	10	0.2
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.06
MTBE	ND	0.5	0.09
trans-1,2-Dichloroethene	7.1	0.5	0.2
1,1-Dichloroethane	ND	0.5	0.08
2-Butanone	ND	10	0.1
cis-1,2-Dichloroethene	16	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.09
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	0.2 J	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	3.3	0.5	0.05
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.07
Toluene	ND	0.5	0.08
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.1
1,3-Dichloropropane	ND	0.5	0.08
Tetrachloroethene	ND	0.5	0.2
Dibromochloromethane	ND	0.5	0.09
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.09
1,1,1,2-Tetrachloroethane	ND	0.5	0.07
Ethylbenzene	ND	0.5	0.2
m,p-Xylenes	ND	0.5	0.07
o-Xylene	ND	0.5	0.09
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.2
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.09
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.2
Bromobenzene	ND	0.5	0.04

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Field ID:	MW-03-A7444	Batch#:	139050
Lab ID:	203802-008	Sampled:	06/06/08
Matrix:	Water	Received:	06/06/08
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	0.5	0.2
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.2
sec-Butylbenzene	ND	0.5	0.2
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.2
1,2-Dichlorobenzene	ND	0.5	0.2
1,2-Dibromo-3-Chloropropane	ND	2.0	0.4
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	0.5	0.2
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-123
1,2-Dichloroethane-d4	88	76-138
Toluene-d8	92	80-120
Bromofluorobenzene	116	80-120

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Field ID:	MW-05-A7446	Batch#:	139050
Lab ID:	203802-009	Sampled:	06/06/08
Matrix:	Water	Received:	06/06/08
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
tert-Butyl Alcohol (TBA)	ND	10	0.9
Chloromethane	ND	1.0	0.2
Vinyl Chloride	ND	0.5	0.1
Isopropyl Ether (DIPE)	ND	0.5	0.07
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Ethyl tert-Amyl Ether (TAME)	ND	0.5	0.09
Trichlorofluoromethane	ND	1.0	0.1
Acetone	1.0 J b	10	0.2
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.2
Carbon Disulfide	0.1 J	0.5	0.06
MTBE	ND	0.5	0.09
trans-1,2-Dichloroethene	ND	0.5	0.2
1,1-Dichloroethane	ND	0.5	0.08
2-Butanone	ND	10	0.1
cis-1,2-Dichloroethene	1.9	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.09
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	0.4 J	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.05
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.07
Toluene	ND	0.5	0.08
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.1
1,3-Dichloropropane	ND	0.5	0.08
Tetrachloroethene	ND	0.5	0.2
Dibromochloromethane	ND	0.5	0.09
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.09
1,1,1,2-Tetrachloroethane	ND	0.5	0.07
Ethylbenzene	ND	0.5	0.2
m,p-Xylenes	ND	0.5	0.07
o-Xylene	ND	0.5	0.09
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.2
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.09
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.2
Bromobenzene	ND	0.5	0.04

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Field ID:	MW-05-A7446	Batch#:	139050
Lab ID:	203802-009	Sampled:	06/06/08
Matrix:	Water	Received:	06/06/08
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	0.5	0.2
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.2
sec-Butylbenzene	ND	0.5	0.2
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.2
1,2-Dichlorobenzene	ND	0.5	0.2
1,2-Dibromo-3-Chloropropane	ND	2.0	0.4
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	0.5	0.2
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	89	76-138
Toluene-d8	92	80-120
Bromofluorobenzene	114	80-120

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC445584	Batch#:	139050
Matrix:	Water	Analyzed:	06/09/08
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
tert-Butyl Alcohol (TBA)	ND	10	0.9
Chloromethane	ND	1.0	0.2
Vinyl Chloride	ND	0.5	0.1
Isopropyl Ether (DIPE)	ND	0.5	0.07
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Methyl tert-Amyl Ether (TAME)	ND	0.5	0.09
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	0.2
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.06
MTBE	ND	0.5	0.09
trans-1,2-Dichloroethene	ND	0.5	0.2
1,1-Dichloroethane	ND	0.5	0.08
2-Butanone	ND	10	0.1
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.09
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.05
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.07
Toluene	ND	0.5	0.08
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.1
1,3-Dichloropropane	ND	0.5	0.08
Tetrachloroethene	ND	0.5	0.2
Dibromochloromethane	ND	0.5	0.09
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.09
1,1,1,2-Tetrachloroethane	ND	0.5	0.07
Ethylbenzene	ND	0.5	0.2
m,p-Xylenes	ND	0.5	0.07
o-Xylene	ND	0.5	0.09
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.2
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.09
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.2
Bromobenzene	ND	0.5	0.04
1,3,5-Trimethylbenzene	ND	0.5	0.2

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC445584	Batch#:	139050
Matrix:	Water	Analyzed:	06/09/08
Units:	ug/L		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.2
sec-Butylbenzene	ND	0.5	0.2
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.2
1,2-Dichlorobenzene	ND	0.5	0.2
1,2-Dibromo-3-Chloropropane	ND	2.0	0.4
1,2,4-Trichlorobenzene	0.2 J	0.5	0.1
Hexachlorobutadiene	ND	0.5	0.2
Naphthalene	0.4 J	2.0	0.1
1,2,3-Trichlorobenzene	0.3 J	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-123
1,2-Dichloroethane-d4	89	76-138
Toluene-d8	93	80-120
Bromofluorobenzene	110	80-120

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 5030B
Project#:	ALAMEDA	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	139050
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Type: BS Lab ID: QC445585

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	50.00	45.64	91	55-158
Isopropyl Ether (DIPE)	10.00	7.134	71	63-122
Ethyl tert-Butyl Ether (ETBE)	10.00	7.657	77	62-133
Methyl tert-Amyl Ether (TAME)	10.00	8.323	83	69-137
1,1-Dichloroethene	20.00	18.73	94	77-132
TBE	10.00	7.534	75	60-136
enzene	20.00	18.48	92	80-120
Trichloroethene	20.00	18.02	90	80-120
Toluene	20.00	19.55	98	80-121
Chlorobenzene	20.00	20.07	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-123
1,2-Dichloroethane-d4	84	76-138
Toluene-d8	91	80-120
Bromofluorobenzene	102	80-120

Type: BSD Lab ID: QC445586

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	50.00	44.75	89	55-158	2	20
Isopropyl Ether (DIPE)	10.00	7.100	71	63-122	0	20
Ethyl tert-Butyl Ether (ETBE)	10.00	7.767	78	62-133	1	20
Methyl tert-Amyl Ether (TAME)	10.00	8.995	90	69-137	8	20
1,1-Dichloroethene	20.00	18.34	92	77-132	2	20
TBE	10.00	7.800	78	60-136	3	20
enzene	20.00	19.54	98	80-120	6	20
richloroethene	20.00	19.10	95	80-120	6	20
Toluene	20.00	20.67	103	80-121	6	20
Chlorobenzene	20.00	21.09	105	80-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-123
1,2-Dichloroethane-d4	88	76-138
Toluene-d8	93	80-120
Bromofluorobenzene	100	80-120

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 203802 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : BFB IDF : 1.0
Seqnum : 478186670004 File : he804 Time : 08-MAY-2008 16:24

Standards: S7916

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	14776	26.91	
75	30% - 60% of mass 95	24487	44.59	
95		54914		
96	5% - 9% of mass 95	3485	6.35	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	36592	66.64	
175	5% - 9% of mass 174	2220	6.07	
176	> 95% and < 101% of mass 174	34925	95.44	
177	5% - 9% of mass 176	2479	7.10	

Analyst: BO Date: 05/09/08 Reviewer: LW Date: 05/09/08

CURTIS & TOMPKINS BFB TUNE FOR 203802 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : BFB IDF : 1.0
Seqnum : 478232520002 File : hf902 Time : 09-JUN-2008 11:57

Standards: S7916

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9788	20.49	
75	30% - 60% of mass 95	20327	42.55	
95		47768		
96	5% - 9% of mass 95	3225	6.75	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	33592	70.32	
175	5% - 9% of mass 174	1964	5.85	
176	> 95% and < 101% of mass 174	32802	97.65	
177	5% - 9% of mass 176	2183	6.66	

Analyst: ACM Date: 06/10/08 Reviewer: LW Date: 06/10/08

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 203802 MSVOA Water: EPA 8260B

Inst : MSVOA08
Calnum : 478186670001
Units : ug/L

Name : 826GOX8
Date : 08-MAY-2008 18:12
X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	he807	478186670007	0.25/0.5PPB	08-MAY-2008 18:12	S8974 (2000000X), S9035 (2000000X), S8994 (1000000X), S8787 (5000X)
L2	he808	478186670008	0.5/1PPB	08-MAY-2008 18:48	S8974 (1000000X), S9035 (1000000X), S8994 (500000X), S8787 (5000X)
L3	he809	478186670009	2PPB	08-MAY-2008 19:25	S8974 (250000X), S9035 (500000X), S8994 (250000X), S8787 (5000X)
L4	he810	478186670010	5PPB	08-MAY-2008 20:02	S8974 (100000X), S9035 (200000X), S8994 (100000X), S8787 (5000X)
L5	he811	478186670011	10PPB	08-MAY-2008 20:38	S8974 (50000X), S9035 (100000X), S8994 (50000X), S8787 (5000X)
L6	he812	478186670012	20PPB	08-MAY-2008 21:15	S8974 (25000X), S9035 (50000X), S8994 (25000X), S8787 (5000X)
L7	he813	478186670013	50PPB	08-MAY-2008 21:53	S8974 (10000X), S9035 (20000X), S8994 (10000X), S8787 (5000X)
L8	he814	478186670014	75PPB	08-MAY-2008 22:30	S8974 (6667X), S9035 (13330X), S8994 (6667X), S8787 (5000X)
L9	he815	478186670015	100PPB	08-MAY-2008 23:06	S8974 (5000X), S9035 (10000X), S8994 (5000X), S8787 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.5707m	0.5430m	0.5248m	0.5547m	0.5843m	0.5479m	0.5275	0.4989	AVRG		1.83830		0.5440	5	15	0.05	0.99	
Chloromethane		0.9741m	0.9094m	0.8980m	0.8878m	0.8798m	0.8006m	0.7815	0.7302	AVRG		1.16593		0.8577	9	15	0.10	0.99	
Vinyl Chloride	0.6091m	0.5960m	0.6100m	0.6106m	0.6093m	0.6469m	0.5834m	0.5727	0.5259	AVRG		1.67787		0.5960	6	15	0.05	0.99	
Bromomethane		0.1407m	0.1561m	0.1677m	0.1906m	0.2086m	0.2388m			QUAD	0.53591	5.01097	-0.07286	0.1838	1.000	15	0.05	0.99	
Chloroethane		0.2963m	0.3263m	0.3245m	0.3160m	0.3418m	0.3012m	0.2946	0.2718	AVRG		3.23561		0.3091	7	15	0.05	0.99	
Trichlorofluoromethane		0.4260	0.4396	0.3882	0.4247m	0.4486m	0.4136	0.3972	0.3641	AVRG		2.42270		0.4128	7	15	0.05	0.99	
Acetone			0.3380	0.2822	0.3116	0.3250	0.2962	0.3081	0.2759	AVRG		3.27553		0.3053	7	15	0.05	0.99	
1,1-Dichloroethene		0.2748	0.3052	0.2583	0.3018	0.3043	0.2943	0.2965	0.2868	AVRG		3.44543		0.2902	6	15	0.05	0.99	
Methylene Chloride		0.4007	0.4453	0.4129m	0.4390	0.4429	0.4320	0.4271	0.4105	AVRG		2.34582		0.4263	4	15	0.05	0.99	
Carbon Disulfide		1.2830m	1.5154	1.2855	1.4718	1.4963	1.4106	1.4084	1.3557	AVRG		0.71259		1.4033	6	15	0.05	0.99	
MTBE		0.9615	1.0906	0.9484	1.0629	1.1168	1.1060	1.1036	1.0403	AVRG		0.94897		1.0538	6	15	0.05	0.99	
trans-1,2-Dichloroethene		0.3662	0.3796	0.3210	0.3559	0.3633	0.3494	0.3439	0.3338	AVRG		2.84374		0.3517	5	15	0.05	0.99	
1,1-Dichloroethane		0.7499	0.8914	0.8024	0.8597	0.8812	0.8443	0.8321	0.7942	AVRG		1.20206		0.8319	6	15	0.10	0.99	
2-Butanone		0.4365	0.3769	0.3288	0.3679	0.3904	0.3548	0.3536	0.3125	AVRG		2.73848		0.3652	10	15	0.05	0.99	
2,2-Dichloropropane		0.4868	0.4609	0.4091	0.4609	0.4612	0.4376	0.4184	0.3974	AVRG		2.26479		0.4415	7	15	0.05	0.99	
cis-1,2-Dichloroethene		0.3826	0.3800	0.3549	0.3857	0.3955	0.3899	0.3786	0.3623	AVRG		2.64073		0.3787	4	15	0.05	0.99	
Chloroform		0.5448	0.6729	0.6045	0.6436	0.6759	0.6401	0.6243	0.5876	AVRG		1.60201		0.6242	7	15	0.05	0.99	
Bromochloromethane		0.1670	0.1875	0.1677	0.1923	0.1919	0.1895	0.1871	0.1790	AVRG		5.47146		0.1828	6	15	0.05	0.99	
1,1,1-Trichloroethane		0.4329	0.4599	0.3890	0.4416	0.4454	0.4198	0.4243	0.4021	AVRG		2.34250		0.4269	5	15	0.05	0.99	
1,1-Dichloropropene		0.2293	0.2511	0.2132	0.2600	0.2595	0.2542	0.2471	0.2356	AVRG		4.10246		0.2438	7	15	0.05	0.99	
Carbon Tetrachloride		0.1702	0.1700	0.1446	0.1774	0.1812	0.1771	0.1702	0.1672	AVRG		5.89117		0.1697	7	15	0.05	0.99	
1,2-Dichloroethane		0.2952	0.3129	0.2605	0.2988	0.3109	0.3003	0.2954	0.2879	AVRG		3.38705		0.2952	6	15	0.05	0.99	
Benzene		0.6942	0.7816	0.7023	0.7525	0.7618	0.7390	0.7026	0.6645	AVRG		1.37967		0.7248	5	15	0.05	0.99	
Trichloroethene		0.1550	0.1858	0.1677	0.1838	0.1873	0.1862	0.1821	0.1801	AVRG		5.60204		0.1785	6	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
1,2-Dichloropropane		0.2369	0.2686	0.2353	0.2810m	0.2710m	0.2688m	0.2676	0.2548	AVRG		3.83880		0.2605	6	15	0.05	0.99	
Bromodichloromethane		0.2243	0.2488	0.2229	0.2601	0.2643	0.2682	0.2660	0.2566	AVRG		3.97774		0.2514	7	15	0.05	0.99	
Dibromomethane		0.1162	0.1415	0.1172	0.1423	0.1445	0.1418	0.1438	0.1377	AVRG		7.37349		0.1356	9	15	0.05	0.99	
4-Methyl-2-Pentanone		0.3367	0.3496	0.3021	0.3588	0.3968	0.3697	0.3868	0.3539	AVRG		2.80277		0.3568	8	15	0.05	0.99	
Toluene		0.3936	0.3971	0.3693	0.4236	0.4222	0.4256	0.4147	0.3949	AVRG		2.46842		0.4051	5	15	0.05	0.99	
1,1,2-Trichloroethane		0.1050	0.1070	0.0910	0.1065	0.1068	0.1081	0.1080	0.1035	AVRG		9.57126		0.1045	5	15	0.05	0.99	
2-Hexanone		0.2993	0.2962	0.2651	0.3037	0.3287	0.3108	0.3192	0.2951	AVRG		3.30838		0.3023	6	15	0.05	0.99	
1,3-Dichloropropane		0.3621	0.4001	0.3635	0.3977	0.4202	0.4146	0.4028	0.3857	AVRG		2.54243		0.3933	5	15	0.05	0.99	
Tetrachloroethene		0.1201	0.1240	0.1198	0.1430	0.1470	0.1463	0.1499	0.1447	AVRG		7.30718		0.1369	10	15	0.05	0.99	
Dibromochloromethane		0.1745	0.1992	0.1873	0.2138	0.2304	0.2316	0.2317	0.2297	AVRG		4.71125		0.2123	11	15	0.05	0.99	
1,2-Dibromoethane		0.1697	0.2037	0.1667	0.1870	0.2006	0.1982	0.1993	0.1885	AVRG		5.28516		0.1892	8	15	0.05	0.99	
Chlorobenzene		0.4614	0.5071	0.4516	0.5169	0.5279	0.5290	0.5150	0.4945	AVRG		1.99834		0.5004	6	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.1401	0.1745	0.1523	0.1770	0.1826	0.1808	0.1795	0.1779	AVRG		5.86205		0.1706	9	15	0.05	0.99	
Ethylbenzene		0.8730	0.8600	0.8205	0.9301	0.9344	0.8964	0.8645	0.8067	AVRG		1.14519		0.8732	5	15	0.05	0.99	
m,p-Xylenes	0.2425	0.2758	0.2919	0.2768	0.3256	0.3290	0.3155	0.2978	0.2773	AVRG		3.41924		0.2925	10	15	0.05	0.99	
o-Xylene		0.3102	0.2993	0.2841	0.3316	0.3332	0.3261	0.3196	0.3041	AVRG		3.18981		0.3135	5	15	0.05	0.99	
Styrene		0.4906	0.5248	0.4957	0.5794	0.6001	0.5910	0.5760	0.5415	AVRG		1.81857		0.5499	8	15	0.05	0.99	
Bromoform		0.0990	0.1244	0.1121	0.1345	0.1403	0.1457	0.1501	0.1474	AVRG		7.59342		0.1317	14	15	0.10	0.99	
Isopropylbenzene		1.4848	1.5809	1.4891	1.7623	1.7300	1.6802	1.6646	1.5613	AVRG		0.61761		1.6191	7	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.6591	0.7430	0.6205	0.6955	0.7265	0.6904	0.7034	0.6359	AVRG		1.46138		0.6843	6	15	0.30	0.99	
1,2,3-Trichloropropane		0.1160	0.1641	0.1547	0.1647	0.1700	0.1630	0.1688	0.1550	AVRG		6.36714		0.1571	11	15	0.05	0.99	
Propylbenzene		1.9776	1.9581	1.8264	2.1954	2.1855	2.0753	1.9825	1.7954	AVRG		0.50012		1.9995	7	15	0.05	0.99	
Bromobenzene		0.4170	0.4366	0.3771	0.4341	0.4360	0.4281	0.4198	0.3969	AVRG		2.39138		0.4182	5	15	0.05	0.99	
1,3,5-Trimethylbenzene		1.0941	1.1817	1.1028	1.2870	1.2993	1.2464	1.2345	1.1240	AVRG		0.83597		1.1962	7	15	0.05	0.99	
2-Chlorotoluene		1.5171	1.5065	1.3738	1.5737	1.5266	1.4330	1.3888	1.2650	AVRG		0.69057		1.4481	7	15	0.05	0.99	
4-Chlorotoluene		1.4489	1.3700	1.2522	1.4389	1.4390	1.4014	1.3954	1.3121	AVRG		0.72347		1.3822	5	15	0.05	0.99	
tert-Butylbenzene		0.9282	0.8225	0.8186	1.0233	1.0556	1.0665	1.0856	1.0163	AVRG		1.02346		0.9771	11	15	0.05	0.99	
1,2,4-Trimethylbenzene		1.0064	1.0385	1.0318	1.2205	1.2281	1.2673	1.2814	1.1988	AVRG		0.86274		1.1591	10	15	0.05	0.99	
sec-Butylbenzene		1.3070	1.1958	1.1338	1.4904	1.5600	1.6075	1.6391	1.5255	AVRG		0.69814		1.4324	14	15	0.05	0.99	
para-Isopropyl Toluene		0.9244	0.8739	0.8380	1.0585	1.1143	1.1721	1.2196	1.1530	AVRG		0.95765		1.0442	14	15	0.05	0.99	
1,3-Dichlorobenzene		0.7379	0.7315	0.6816	0.7681	0.7679	0.7628	0.7639	0.7292	AVRG		1.34612		0.7429	4	15	0.05	0.99	
1,4-Dichlorobenzene		0.7164	0.7268	0.6681	0.7483	0.7693	0.7653	0.7650	0.7285	AVRG		1.35881		0.7359	5	15	0.05	0.99	
n-Butylbenzene		0.8326	0.7375	0.6993	0.8870	0.9238	0.9969	1.0848	1.0336	AVRG		1.11180		0.8994	15	15	0.05	0.99	
1,2-Dichlorobenzene		0.6938	0.7117	0.6654	0.7762	0.7668	0.7656	0.7796	0.7346	AVRG		1.35739		0.7367	6	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.1275	0.1394	0.1045	0.1211	0.1284	0.1210	0.1285	0.1201	AVRG		8.07590		0.1238	8	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.2371	0.2164	0.2020	0.2505	0.2494	0.2793	0.2979	0.2984	AVRG		3.93894		0.2539	14	15	0.05	0.99	
Hexachlorobutadiene		0.0636	0.0699	0.0617	0.0843	0.0909	0.0967	0.1062		QUAD	0.56540	11.4425	-0.26254	0.0819	1.000	15	0.05	0.99	
Naphthalene		0.7393	0.7443	0.6498	0.7554	0.7937	0.8311	0.9361	0.9068	AVRG		1.25853		0.7946	12	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.2365	0.2126	0.2043	0.2337	0.2423	0.2734	0.2938	0.2896	AVRG		4.02759		0.2483	14	15	0.05	0.99	
tert-Butyl Alcohol (TBA)		0.0335	0.0423	0.0389	0.0432	0.0474	0.0424	0.0452	0.0412	AVRG		23.9491		0.0418	10	15	0.005	0.99	
Isopropyl Ether (DIPE)		1.9953	2.2536	1.9687	2.2047	2.2472	2.1902	2.0918	1.9537	AVRG		0.47323		2.1131	6	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Ethyl tert-Butyl Ether (ETBE)		1.2460	1.4939	1.2978	1.5078	1.5472	1.5355	1.4636	1.4053	AVRG		0.69463		1.4396	8	15	0.05	0.99	
Methyl tert-Amyl Ether (TAME)		0.4566	0.5662	0.4956	0.5513	0.5719	0.5616	0.5391	0.5099	AVRG		1.88137		0.5315	8	15	0.05	0.99	
Dibromofluoromethane							0.7388			AVRG		1.35351		0.7388	0	15	0.05	0.99	
1,2-Dichloroethane-d4							0.4505			AVRG		2.21965		0.4505	0	15	0.05	0.99	
Toluene-d8							1.1103			AVRG		0.90066		1.1103	0	15	0.05	0.99	
Bromofluorobenzene							1.1962			AVRG		0.83599		1.1962	0	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	5	2.000	0	5.000	-4	10.00	2	20.00	7	50.00	1	75.00	-3	100.0	-8
Chloromethane			1.000	14	2.000	6	5.000	5	10.00	4	20.00	3	50.00	-7	75.00	-9	100.0	-15
Vinyl Chloride	0.500	2	1.000	0	2.000	2	5.000	2	10.00	2	20.00	9	50.00	-2	75.00	-4	100.0	-12
Bromomethane			1.000	24	2.000	5	5.000	-6	10.00	-2	20.00	1	50.00	0				
Chloroethane			1.000	-4	2.000	6	5.000	5	10.00	2	20.00	11	50.00	-3	75.00	-5	100.0	-12
Trichlorofluoromethane			1.000	3	2.000	6	5.000	-6	10.00	3	20.00	9	50.00	0	75.00	-4	100.0	-12
Acetone					2.000	11	5.000	-8	10.00	2	20.00	6	50.00	-3	75.00	1	100.0	-10
1,1-Dichloroethene			0.500	-5	2.000	5	5.000	-11	10.00	4	20.00	5	50.00	1	75.00	2	100.0	-1
Methylene Chloride			0.500	-6	2.000	4	5.000	-3	10.00	3	20.00	4	50.00	1	75.00	0	100.0	-4
Carbon Disulfide			0.500	-9	2.000	8	5.000	-8	10.00	5	20.00	7	50.00	1	75.00	0	100.0	-3
MTBE			0.500	-9	2.000	3	5.000	-10	10.00	1	20.00	6	50.00	5	75.00	5	100.0	-1
trans-1,2-Dichloroethene			0.500	4	2.000	8	5.000	-9	10.00	1	20.00	3	50.00	-1	75.00	-2	100.0	-5
1,1-Dichloroethane			0.500	-10	2.000	7	5.000	-4	10.00	3	20.00	6	50.00	1	75.00	0	100.0	-5
2-Butanone			0.500	20	2.000	3	5.000	-10	10.00	1	20.00	7	50.00	-3	75.00	-3	100.0	-14
2,2-Dichloropropane			0.500	10	2.000	4	5.000	-7	10.00	4	20.00	4	50.00	-1	75.00	-5	100.0	-10
cis-1,2-Dichloroethene			0.500	1	2.000	0	5.000	-6	10.00	2	20.00	4	50.00	3	75.00	0	100.0	-4
Chloroform			0.500	-13	2.000	8	5.000	-3	10.00	3	20.00	8	50.00	3	75.00	0	100.0	-6
Bromochloromethane			0.500	-9	2.000	3	5.000	-8	10.00	5	20.00	5	50.00	4	75.00	2	100.0	-2
1,1,1-Trichloroethane			0.500	1	2.000	8	5.000	-9	10.00	3	20.00	4	50.00	-2	75.00	-1	100.0	-6
1,1-Dichloropropene			0.500	-6	2.000	3	5.000	-13	10.00	7	20.00	6	50.00	4	75.00	1	100.0	-3
Carbon Tetrachloride			0.500	0	2.000	0	5.000	-15	10.00	5	20.00	7	50.00	4	75.00	0	100.0	-1
1,2-Dichloroethane			0.500	0	2.000	6	5.000	-12	10.00	1	20.00	5	50.00	2	75.00	0	100.0	-2
Benzene			0.500	-4	2.000	8	5.000	-3	10.00	4	20.00	5	50.00	2	75.00	-3	100.0	-8
Trichloroethene			0.500	-13	2.000	4	5.000	-6	10.00	3	20.00	5	50.00	4	75.00	2	100.0	1
1,2-Dichloropropane			0.500	-9	2.000	3	5.000	-10	10.00	8	20.00	4	50.00	3	75.00	3	100.0	-2
Bromodichloromethane			0.500	-11	2.000	-1	5.000	-11	10.00	3	20.00	5	50.00	7	75.00	6	100.0	2
Dibromomethane			0.500	-14	2.000	4	5.000	-14	10.00	5	20.00	7	50.00	5	75.00	6	100.0	2
4-Methyl-2-Pentanone			0.500	-6	2.000	-2	5.000	-15	10.00	1	20.00	11	50.00	4	75.00	8	100.0	-1
Toluene			0.500	-3	2.000	-2	5.000	-9	10.00	5	20.00	4	50.00	5	75.00	2	100.0	-3
1,1,2-Trichloroethane			0.500	1	2.000	2	5.000	-13	10.00	2	20.00	2	50.00	3	75.00	3	100.0	-1
2-Hexanone			0.500	-1	2.000	-2	5.000	-12	10.00	0	20.00	9	50.00	3	75.00	6	100.0	-2
1,3-Dichloropropane			0.500	-8	2.000	2	5.000	-8	10.00	1	20.00	7	50.00	5	75.00	2	100.0	-2
Tetrachloroethene			0.500	-12	2.000	-9	5.000	-12	10.00	4	20.00	7	50.00	7	75.00	10	100.0	6
Dibromochloromethane			0.500	-18	2.000	-6	5.000	-12	10.00	1	20.00	9	50.00	9	75.00	9	100.0	8
1,2-Dibromoethane			0.500	-10	2.000	8	5.000	-12	10.00	-1	20.00	6	50.00	5	75.00	5	100.0	0
Chlorobenzene			0.500	-8	2.000	1	5.000	-10	10.00	3	20.00	5	50.00	6	75.00	3	100.0	-1
1,1,1,2-Tetrachloroethane			0.500	-18	2.000	2	5.000	-11	10.00	4	20.00	7	50.00	6	75.00	5	100.0	4
Ethylbenzene			0.500	0	2.000	-2	5.000	-6	10.00	7	20.00	7	50.00	3	75.00	-1	100.0	-8
m,p-Xylenes	0.500	-17	1.000	-6	4.000	0	10.00	-5	20.00	11	40.00	12	100.0	8	150.0	2	200.0	-5
o-Xylene			0.500	-1	2.000	-5	5.000	-9	10.00	6	20.00	6	50.00	4	75.00	2	100.0	-3
Styrene			0.500	-11	2.000	-5	5.000	-10	10.00	5	20.00	9	50.00	7	75.00	5	100.0	-2
Bromoform			0.500	-25	2.000	-6	5.000	-15	10.00	2	20.00	7	50.00	11	75.00	14	100.0	12

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Isopropylbenzene			0.500	-8	2.000	-2	5.000	-8	10.00	9	20.00	7	50.00	4	75.00	3	100.0	-4
1,1,2,2-Tetrachloroethane			0.500	-4	2.000	9	5.000	-9	10.00	2	20.00	6	50.00	1	75.00	3	100.0	-7
1,2,3-Trichloropropane			0.500	-26	2.000	5	5.000	-1	10.00	5	20.00	8	50.00	4	75.00	7	100.0	-1
Propylbenzene			0.500	-1	2.000	-2	5.000	-9	10.00	10	20.00	9	50.00	4	75.00	-1	100.0	-10
Bromobenzene			0.500	0	2.000	4	5.000	-10	10.00	4	20.00	4	50.00	2	75.00	0	100.0	-5
1,3,5-Trimethylbenzene			0.500	-9	2.000	-1	5.000	-8	10.00	8	20.00	9	50.00	4	75.00	3	100.0	-6
2-Chlorotoluene			0.500	5	2.000	4	5.000	-5	10.00	9	20.00	5	50.00	-1	75.00	-4	100.0	-13
4-Chlorotoluene			0.500	5	2.000	-1	5.000	-9	10.00	4	20.00	4	50.00	1	75.00	1	100.0	-5
tert-Butylbenzene			0.500	-5	2.000	-16	5.000	-16	10.00	5	20.00	8	50.00	9	75.00	11	100.0	4
1,2,4-Trimethylbenzene			0.500	-13	2.000	-10	5.000	-11	10.00	5	20.00	6	50.00	9	75.00	11	100.0	3
sec-Butylbenzene			0.500	-9	2.000	-17	5.000	-21	10.00	4	20.00	9	50.00	12	75.00	14	100.0	7
para-Isopropyl Toluene			0.500	-11	2.000	-16	5.000	-20	10.00	1	20.00	7	50.00	12	75.00	17	100.0	10
1,3-Dichlorobenzene			0.500	-1	2.000	-2	5.000	-8	10.00	3	20.00	3	50.00	3	75.00	3	100.0	-2
1,4-Dichlorobenzene			0.500	-3	2.000	-1	5.000	-9	10.00	2	20.00	5	50.00	4	75.00	4	100.0	-1
n-Butylbenzene			0.500	-7	2.000	-18	5.000	-22	10.00	-1	20.00	3	50.00	11	75.00	21	100.0	15
1,2-Dichlorobenzene			0.500	-6	2.000	-3	5.000	-10	10.00	5	20.00	4	50.00	4	75.00	6	100.0	0
1,2-Dibromo-3-Chloropropane			0.500	3	2.000	13	5.000	-16	10.00	-2	20.00	4	50.00	-2	75.00	4	100.0	-3
1,2,4-Trichlorobenzene			0.500	-7	2.000	-15	5.000	-20	10.00	-1	20.00	-2	50.00	10	75.00	17	100.0	18
Hexachlorobutadiene			0.500	86	2.000	8	5.000	-19	10.00	0	20.00	3	50.00	-1	75.00	0		
Naphthalene			0.500	-7	2.000	-6	5.000	-18	10.00	-5	20.00	0	50.00	5	75.00	18	100.0	14
1,2,3-Trichlorobenzene			0.500	-5	2.000	-14	5.000	-18	10.00	-6	20.00	-2	50.00	10	75.00	18	100.0	17
tert-Butyl Alcohol (TBA)			5.000	-20	20.00	1	50.00	-7	100.0	3	200.0	14	500.0	2	750.0	8	1000	-1
Isopropyl Ether (DIPE)			0.500	-6	2.000	7	5.000	-7	10.00	4	20.00	6	50.00	4	75.00	-1	100.0	-8
Ethyl tert-Butyl Ether (ETBE)			0.500	-13	2.000	4	5.000	-10	10.00	5	20.00	7	50.00	7	75.00	3	100.0	-2
Methyl tert-Amyl Ether (TAME)			0.500	-14	2.000	7	5.000	-7	10.00	4	20.00	8	50.00	6	75.00	1	100.0	-4
Dibromofluoromethane													50.00	0				
1,2-Dichloroethane-d4													50.00	0				
Toluene-d8													50.00	0				
Bromofluorobenzene													50.00	0				

Analyst: BO **Date:** 05/09/08 **Reviewer:** LW **Date:** 05/09/08

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 203802 MSVOA Water
EPA 8260B

Inst : MSVOA08 Name : 826GOX8
Calnum : 478186670001 Cal Date : 08-MAY-2008 Type : WATER

ICV 478186670017 (he817 09-MAY-2008) stds: S9163 (10000X), S8787 (5000X)
ICV 478186670018 (he818 09-MAY-2008) stds: S8985 (10000X), S9023 (10000X), S8787 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Freon 12	478186670017	0.5440	0.3284	25.00	15.09	ug/L	**-40**	25	v- ***
Chloromethane	478186670017	0.8577	0.7108	25.00	20.72	ug/L	-17	25	m
Vinyl Chloride	478186670017	0.5960	0.5069	25.00	21.26	ug/L	-15	25	m
Bromomethane	478186670017	0.1838	0.1741	25.00	20.97	ug/L	-16	25	m
Chloroethane	478186670017	0.3091	0.2732	25.00	22.10	ug/L	-12	25	
Trichlorofluoromethane	478186670017	0.4128	0.3794	25.00	22.98	ug/L	-8	25	
Acetone	478186670018	0.3053	0.2740	25.00	22.44	ug/L	-10	25	
1,1-Dichloroethene	478186670018	0.2902	0.3167	25.00	27.28	ug/L	9	25	
Methylene Chloride	478186670018	0.4263	0.4443	25.00	26.06	ug/L	4	25	
Carbon Disulfide	478186670018	1.4033	1.2092	25.00	21.54	ug/L	-14	25	
MTBE	478186670018	1.0538	1.1002	25.00	26.10	ug/L	4	25	
trans-1,2-Dichloroethene	478186670018	0.3517	0.3625	25.00	25.77	ug/L	3	25	
1,1-Dichloroethane	478186670018	0.8319	0.8600	25.00	25.84	ug/L	3	25	
2-Butanone	478186670018	0.3652	0.3323	25.00	22.75	ug/L	-9	25	
2,2-Dichloropropane	478186670018	0.4415	0.4159	25.00	23.55	ug/L	-6	25	
cis-1,2-Dichloroethene	478186670018	0.3787	0.4044	25.00	26.70	ug/L	7	25	
Chloroform	478186670018	0.6242	0.6618	25.00	26.50	ug/L	6	25	
Bromochloromethane	478186670018	0.1828	0.1968	25.00	26.92	ug/L	8	25	
1,1,1-Trichloroethane	478186670018	0.4269	0.4489	25.00	26.29	ug/L	5	25	
1,1-Dichloropropene	478186670018	0.2438	0.2780	25.00	28.51	ug/L	14	25	
Carbon Tetrachloride	478186670018	0.1697	0.1932	25.00	28.45	ug/L	14	25	
1,2-Dichloroethane	478186670018	0.2952	0.3158	25.00	26.74	ug/L	7	25	
Benzene	478186670018	0.7248	0.8203	25.00	28.29	ug/L	13	25	
Trichloroethene	478186670018	0.1785	0.2142	25.00	30.00	ug/L	20	25	
1,2-Dichloropropane	478186670018	0.2605	0.2756	25.00	26.45	ug/L	6	25	
Bromodichloromethane	478186670018	0.2514	0.2850	25.00	28.35	ug/L	13	25	
Dibromomethane	478186670018	0.1356	0.1461	25.00	26.94	ug/L	8	25	
4-Methyl-2-Pentanone	478186670018	0.3568	0.3500	25.00	24.52	ug/L	-2	25	
Toluene	478186670018	0.4051	0.4668	25.00	28.80	ug/L	15	25	
1,1,2-Trichloroethane	478186670018	0.1045	0.1189	25.00	28.46	ug/L	14	25	
2-Hexanone	478186670018	0.3023	0.3048	25.00	25.21	ug/L	1	25	
1,3-Dichloropropane	478186670018	0.3933	0.4398	25.00	27.95	ug/L	12	25	
Tetrachloroethene	478186670018	0.1369	0.1657	25.00	30.28	ug/L	**21**	25	
Dibromochloromethane	478186670018	0.2123	0.2325	25.00	27.39	ug/L	10	25	
1,2-Dibromoethane	478186670018	0.1892	0.2090	25.00	27.62	ug/L	10	25	
Chlorobenzene	478186670018	0.5004	0.5590	25.00	27.93	ug/L	12	25	
1,1,1,2-Tetrachloroethane	478186670018	0.1706	0.1939	25.00	28.42	ug/L	14	25	
Ethylbenzene	478186670018	0.8732	1.0181	25.00	29.15	ug/L	17	25	
m,p-Xylenes	478186670018	0.2925	0.3517	50.00	60.13	ug/L	20	25	
o-Xylene	478186670018	0.3135	0.3580	25.00	28.55	ug/L	14	25	
Styrene	478186670018	0.5499	0.6440	25.00	29.28	ug/L	17	25	
Bromoform	478186670018	0.1317	0.1512	25.00	28.70	ug/L	15	25	
Isopropylbenzene	478186670018	1.6191	1.7010	25.00	26.26	ug/L	5	25	
1,1,2,2-Tetrachloroethane	478186670018	0.6843	0.6460	25.00	23.60	ug/L	-6	25	
1,2,3-Trichloropropane	478186670018	0.1571	0.1701	25.00	27.07	ug/L	8	25	
Propylbenzene	478186670018	1.9995	2.3257	25.00	29.08	ug/L	16	25	
Bromobenzene	478186670018	0.4182	0.4660	25.00	27.86	ug/L	11	25	

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
1,3,5-Trimethylbenzene	478186670018	1.1962	1.4275	25.00	29.83	ug/L	19	25	
2-Chlorotoluene	478186670018	1.4481	1.6225	25.00	28.01	ug/L	12	25	
4-Chlorotoluene	478186670018	1.3822	1.4845	25.00	26.85	ug/L	7	25	
tert-Butylbenzene	478186670018	0.9771	1.1545	25.00	29.54	ug/L	18	25	
1,2,4-Trimethylbenzene	478186670018	1.1591	1.4212	25.00	30.65	ug/L	**23**	25	
sec-Butylbenzene	478186670018	1.4324	1.7248	25.00	30.10	ug/L	20	25	
para-Isopropyl Toluene	478186670018	1.0442	1.2166	25.00	29.13	ug/L	17	25	
1,3-Dichlorobenzene	478186670018	0.7429	0.8122	25.00	27.33	ug/L	9	25	
1,4-Dichlorobenzene	478186670018	0.7359	0.7979	25.00	27.11	ug/L	8	25	
n-Butylbenzene	478186670018	0.8994	1.0768	25.00	29.93	ug/L	20	25	
1,2-Dichlorobenzene	478186670018	0.7367	0.7966	25.00	27.03	ug/L	8	25	
1,2-Dibromo-3-Chloropropane	478186670018	0.1238	0.1305	25.00	26.35	ug/L	5	25	
1,2,4-Trichlorobenzene	478186670018	0.2539	0.2788	25.00	27.45	ug/L	10	25	
Hexachlorobutadiene	478186670018	0.0819	0.1088	25.00	29.76	ug/L	19	25	
Naphthalene	478186670018	0.7946	0.8532	25.00	26.84	ug/L	7	25	
1,2,3-Trichlorobenzene	478186670018	0.2483	0.2771	25.00	27.91	ug/L	12	25	
tert-Butyl Alcohol (TBA)	478186670018	0.0418	0.0459	125.0	137.3	ug/L	10	25	
Isopropyl Ether (DIPE)	478186670018	2.1131	2.1996	25.00	26.02	ug/L	4	25	
Ethyl tert-Butyl Ether (ETBE)	478186670018	1.4396	1.5262	25.00	26.50	ug/L	6	25	
Methyl tert-Amyl Ether (TAME)	478186670018	0.5315	0.5869	25.00	27.60	ug/L	10	25	

-=low bias m=manual integration v=ICV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 203802 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : 30PPB IDF : 1.0
Seqnum : 478232520003.1 File : hf903 Time : 09-JUN-2008 12:27
Cal : 478186670001 Caldate : 08-MAY-2008 Caltype : WATER
Standards: S9221 (16670X), S9084 (16670X), S9036 (33330X), S9223 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5440	0.5169	30.00	28.51	ug/L	-5	30	0.0500	m
Chloromethane	0.8577	0.6803	30.00	23.79	ug/L	-21	30	0.1000	m
Vinyl Chloride	0.5960	0.5409	30.00	27.23	ug/L	-9	20	0.0500	m
Bromomethane	0.1838	0.2036	30.00	28.43	ug/L	-5	30	0.0500	m
Chloroethane	0.3091	0.2839	30.00	27.56	ug/L	-8	30	0.0500	m
Trichlorofluoromethane	0.4128	0.3691	30.00	26.83	ug/L	-11	30	0.0500	
Acetone	0.3053	0.2120	30.00	20.83	ug/L	**-31**	30	0.0500	c- ***
1,1-Dichloroethene	0.2902	0.2981	30.00	30.81	ug/L	3	20	0.0500	
Methylene Chloride	0.4263	0.4022	30.00	28.30	ug/L	-6	30	0.0500	
Carbon Disulfide	1.4033	1.3028	30.00	27.85	ug/L	-7	30	0.0500	
MTBE	1.0538	0.9666	30.00	27.52	ug/L	-8	30	0.0500	
trans-1,2-Dichloroethene	0.3517	0.3406	30.00	29.06	ug/L	-3	30	0.0500	
1,1-Dichloroethane	0.8319	0.7253	30.00	26.16	ug/L	-13	30	0.1000	
2-Butanone	0.3652	0.2701	30.00	22.19	ug/L	-26	30	0.0500	
2,2-Dichloropropane	0.4415	0.4392	30.00	29.84	ug/L	-1	30	0.0500	
cis-1,2-Dichloroethene	0.3787	0.3601	30.00	28.53	ug/L	-5	30	0.0500	
Chloroform	0.6242	0.5622	30.00	27.02	ug/L	-10	20	0.0500	
Bromochloromethane	0.1828	0.1848	30.00	30.33	ug/L	1	30	0.0500	
1,1,1-Trichloroethane	0.4269	0.3789	30.00	26.63	ug/L	-11	30	0.0500	
1,1-Dichloropropene	0.2438	0.2324	30.00	28.60	ug/L	-5	30	0.0500	
Carbon Tetrachloride	0.1697	0.1583	30.00	27.98	ug/L	-7	30	0.0500	
1,2-Dichloroethane	0.2952	0.2533	30.00	25.74	ug/L	-14	30	0.0500	
Benzene	0.7248	0.6874	30.00	28.45	ug/L	-5	30	0.0500	
Trichloroethene	0.1785	0.1674	30.00	28.13	ug/L	-6	30	0.0500	
1,2-Dichloropropane	0.2605	0.2329	30.00	26.83	ug/L	-11	20	0.0500	
Bromodichloromethane	0.2514	0.2392	30.00	28.54	ug/L	-5	30	0.0500	
Dibromomethane	0.1356	0.1368	30.00	30.26	ug/L	1	30	0.0500	
4-Methyl-2-Pentanone	0.3568	0.2807	30.00	23.60	ug/L	-21	30	0.0500	
Toluene	0.4051	0.4071	30.00	30.15	ug/L	0	20	0.0500	
1,1,2-Trichloroethane	0.1045	0.0988	30.00	28.37	ug/L	-5	30	0.0500	
2-Hexanone	0.3023	0.2443	30.00	24.25	ug/L	-19	30	0.0500	
1,3-Dichloropropane	0.3933	0.3758	30.00	28.66	ug/L	-4	30	0.0500	
Tetrachloroethene	0.1369	0.1534	30.00	33.62	ug/L	12	30	0.0500	
Dibromochloromethane	0.2123	0.2213	30.00	31.28	ug/L	4	30	0.0500	
1,2-Dibromoethane	0.1892	0.1900	30.00	30.12	ug/L	0	30	0.0500	
Chlorobenzene	0.5004	0.5220	30.00	31.30	ug/L	4	30	0.3000	
1,1,1,2-Tetrachloroethane	0.1706	0.1728	30.00	30.39	ug/L	1	30	0.0500	
Ethylbenzene	0.8732	0.8553	30.00	29.39	ug/L	-2	20	0.0500	
m,p-Xylenes	0.2925	0.3161	60.00	64.85	ug/L	8	30	0.0500	
o-Xylene	0.3135	0.3203	30.00	30.65	ug/L	2	30	0.0500	
Styrene	0.5499	0.5691	30.00	31.05	ug/L	3	30	0.0500	
Bromoform	0.1317	0.1422	30.00	32.40	ug/L	8	30	0.1000	
Isopropylbenzene	1.6191	1.6940	30.00	31.39	ug/L	5	30	0.0500	
1,1,2,2-Tetrachloroethane	0.6843	0.6819	30.00	29.90	ug/L	0	30	0.3000	
1,2,3-Trichloropropane	0.1571	0.1535	30.00	29.31	ug/L	-2	30	0.0500	
Propylbenzene	1.9995	2.0480	30.00	30.73	ug/L	2	30	0.0500	
Bromobenzene	0.4182	0.4556	30.00	32.69	ug/L	9	30	0.0500	
1,3,5-Trimethylbenzene	1.1962	1.2739	30.00	31.95	ug/L	6	30	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
2-Chlorotoluene	1.4481	1.4193	30.00	29.40	ug/L	-2	30	0.0500	
4-Chlorotoluene	1.3822	1.3668	30.00	29.67	ug/L	-1	30	0.0500	
tert-Butylbenzene	0.9771	0.9949	30.00	30.55	ug/L	2	30	0.0500	
1,2,4-Trimethylbenzene	1.1591	1.2154	30.00	31.46	ug/L	5	30	0.0500	
sec-Butylbenzene	1.4324	1.5731	30.00	32.95	ug/L	10	30	0.0500	
para-Isopropyl Toluene	1.0442	1.1419	30.00	32.81	ug/L	9	30	0.0500	
1,3-Dichlorobenzene	0.7429	0.8001	30.00	32.31	ug/L	8	30	0.0500	
1,4-Dichlorobenzene	0.7359	0.7766	30.00	31.66	ug/L	6	30	0.0500	
n-Butylbenzene	0.8994	0.9971	30.00	33.26	ug/L	11	30	0.0500	
1,2-Dichlorobenzene	0.7367	0.7815	30.00	31.83	ug/L	6	30	0.0500	
1,2-Dibromo-3-Chloropropane	0.1238	0.1096	30.00	26.54	ug/L	-12	30	0.0500	
1,2,4-Trichlorobenzene	0.2539	0.3132	30.00	37.01	ug/L	23	30	0.0500	
Hexachlorobutadiene	0.0819	0.1314	30.00	41.59	ug/L	**39**	30	0.0500	c+ ***
Naphthalene	0.7946	0.7751	30.00	29.26	ug/L	-2	30	0.0500	
1,2,3-Trichlorobenzene	0.2483	0.2923	30.00	35.32	ug/L	18	30	0.0500	
tert-Butyl Alcohol (TBA)	0.0418	0.0384	300.0	275.8	ug/L	-8	30	0.0050	
Isopropyl Ether (DIPE)	2.1131	1.6729	30.00	23.75	ug/L	-21	30	0.0500	
Ethyl tert-Butyl Ether (ETBE)	1.4396	1.2580	30.00	26.21	ug/L	-13	30	0.0500	
Methyl tert-Amyl Ether (TAME)	0.5315	0.4968	30.00	28.04	ug/L	-7	30	0.0500	
Dibromofluoromethane	0.7388	0.6862	50.00	46.44	ug/L	-7	30	0.0500	
1,2-Dichloroethane-d4	0.4505	0.3764	50.00	41.78	ug/L	-16	30	0.0500	
Toluene-d8	1.1103	1.0052	50.00	45.27	ug/L	-9	30	0.0500	
Bromofluorobenzene	1.1962	1.1862	50.00	49.58	ug/L	-1	30	0.0500	

ISTD (ICAL he813)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1053669	1167040	10.76	10.24	10.23	-0.01
1,4-Difluorobenzene	2009812	2153645	7.16	11.37	11.36	-0.01
Chlorobenzene-d5	1710606	1815556	6.14	15.41	15.41	0.00
1,4-Dichlorobenzene-d4	793102	800382	0.92	18.13	18.12	-0.01

ACM 06/10/08 : Manual integrations by TEW. [general version]

Analyst: MJD Date: 06/17/08 Reviewer: TEW Date: 06/17/08

+=high bias -=low bias c=CCV m=manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 478232520

Date : 06/09/08 Reference : he813
Sequence : MSVOA08 hf9 Analyzed : 05/08/08 21:53

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1053669	10.24	2009812	11.37	1710606	15.41	793102	18.13
		LOWER LIMIT	526835	9.74	1004906	10.87	855303	14.91	396551	17.63
		UPPER LIMIT	2107338	10.74	4019624	11.87	3421212	15.91	1586204	18.63
003	CCV	30PPB	1167040	10.23	2153645	11.36	1815556	15.41	800382	18.12
006	BS	QC445585	1165244	10.23	2223568	11.37	1834701	15.40	808897	18.12
007	BSD	QC445586	1181556	10.23	2185471	11.37	1846924	15.40	817881	18.12
009	BLANK	QC445584	1176626	10.23	2181228	11.36	1810616	15.41	742671	18.12
010	SAMPLE	203831-001	1191148	10.23	2214097	11.36	1888671	15.40	746841	18.12
011	SAMPLE	203802-003	1164306	10.23	2180569	11.37	1856989	15.40	732486	18.11
012	SAMPLE	203802-004	1169450	10.23	2206669	11.37	1844642	15.41	736455	18.12
013	SAMPLE	203802-005	1157004	10.24	2149894	11.37	1853168	15.41	720607	18.12
014	SAMPLE	203802-006	1155724	10.24	2176852	11.37	1858903	15.40	715385	18.12
015	SAMPLE	203802-007	1165069	10.23	2192599	11.37	1853646	15.40	710981	18.12
016	SAMPLE	203802-008	1153365	10.23	2202862	11.37	1854887	15.40	716990	18.12
017	SAMPLE	203802-009	1138606	10.24	2179728	11.37	1828274	15.40	723661	18.12

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 478186670

Instrument : MSVOA08 Begun : 05/08/08 15:10
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	he801	X	IB			05/08/08 15:10	1.0	1
002	he802	TUN	BFB			05/08/08 15:44	1.0	2
003	he803	TUN	BFB			05/08/08 16:04	1.0	2
004	he804	TUN	BFB			05/08/08 16:24	1.0	2
005	he805	X	IB			05/08/08 16:52	1.0	1
006	he806	IB	CALIB IB			05/08/08 17:29	1.0	1
007	he807	ICAL	0.25/0.5PPB			05/08/08 18:12	1.0	3 4 5 1
008	he808	ICAL	0.5/1PPB			05/08/08 18:48	1.0	3 4 5 1
009	he809	ICAL	2PPB			05/08/08 19:25	1.0	3 4 5 1
010	he810	ICAL	5PPB			05/08/08 20:02	1.0	3 4 5 1
011	he811	ICAL	10PPB			05/08/08 20:38	1.0	3 4 5 1
012	he812	ICAL	20PPB			05/08/08 21:15	1.0	3 4 5 1
013	he813	ICAL	50PPB			05/08/08 21:53	1.0	3 4 5 1
014	he814	ICAL	75PPB			05/08/08 22:30	1.0	3 4 5 1
015	he815	ICAL	100PPB			05/08/08 23:06	1.0	3 4 5 1
016	he816	X	IB			05/08/08 23:44	1.0	1
017	he817	ICV	25PPB			05/09/08 00:21	1.0	6 1
018	he818	ICV	25PPB			05/09/08 00:58	1.0	7 8 1
019	he819	X	IB			05/09/08 01:36	1.0	1
020	he820	X	IB			05/09/08 02:12	1.0	1
021	he821	X	IB			05/09/08 02:49	1.0	1

TEW 05/08/08 : Adjusted tune prior to file he804.

BO 05/09/08 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs he801 through he821.

Analyst: BO Date: 05/09/08 Reviewer: LW Date: 05/09/08

Standards used: 1=S8787 2=S7916 3=S8974 4=S9035 5=S8994 6=S9163 7=S8985 8=S9023

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 478232520

Instrument : MSVOA08 Begun : 06/09/08 11:20
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	hf901	X	IB			06/09/08 11:20	1.0	1	
002	hf902	TUN	BFB			06/09/08 11:57	1.0	2	
003	hf903	CCV	30PPB			06/09/08 12:27	1.0	3 4 5 1	
004	hf904	X	QC445585	Water	139050	06/09/08 13:04	1.0	6 7 8 1	
005	hf905	X	QC445586	Water	139050	06/09/08 13:40	1.0	6 7 8 1	
006	hf906	BS	QC445585	Water	139050	06/09/08 14:28	1.0	6 9 8 1	
007	hf907	BSD	QC445586	Water	139050	06/09/08 15:05	1.0	6 9 8 1	
008	hf908	X	IB			06/09/08 15:47	1.0	1	
009	hf909	BLANK	QC445584	Water	139050	06/09/08 16:24	1.0	1	
010	hf910	SAMPLE	203831-001	Water	139050	06/09/08 17:43	1.0	1	
011	hf911	SAMPLE	203802-003	Water	139050	06/09/08 18:25	1.0	1	
012	hf912	SAMPLE	203802-004	Water	139050	06/09/08 19:02	1.0	1	
013	hf913	SAMPLE	203802-005	Water	139050	06/09/08 19:39	1.0	1	
014	hf914	SAMPLE	203802-006	Water	139050	06/09/08 20:16	1.0	1	pH > 2
015	hf915	SAMPLE	203802-007	Water	139050	06/09/08 20:52	1.0	1	
016	hf916	SAMPLE	203802-008	Water	139050	06/09/08 21:29	1.0	1	headspace <= 1 mL
017	hf917	SAMPLE	203802-009	Water	139050	06/09/08 22:05	1.0	1	headspace <= 1 mL
018	hf918	X	IB			06/09/08 22:42	1.0	1	
019	hf919	X	IB			06/09/08 23:19	1.0	1	
020	hf920	X	IB			06/09/08 23:56	1.0	1	

ACM 06/10/08 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

Analyst: ACM Date: 06/10/08 Reviewer: LW Date: 06/10/08

Standards used: 1=S9223 2=S7916 3=S9221 4=S9084 5=S9036 6=S9290 7=S9348 8=S9023 9=S9446

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GC/MS VOLATILE ORGANICS

Batch #: ~~138050~~ 139050
ZGW 6-9-08

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	203831-1	A	<2				8	1x	TEW 6-9-08
2	203802-3	C						TB	
3	-4	B						1x	
4	-5	B							
5	-6	B	8						
6	-7	B	<2						
7	-8	C		Bubble <1mL					
8	-9	B							
9									
10									
11									
12									
13									
14									
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32									
33									
34									
35									

Manual Integrations for 203802 MSVOA Water
Curtis & Tompkins Laboratories

Type	Sample ID	Analyte	Instrument	Analyzed
SAMPLE	203802-004	Vinyl Chloride	MSVOA08	06/09/08 19:02

Metals Results & QC Summary
Filtrate

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #: 203802		Project#:	ALAMEDA
Client: Innovative Technical Solutions,Inc.		Location:	Alameda Basewide
Field ID:	OU2B-MW01-A7400	Sampled:	06/05/08
Lab ID:	203802-001	Received:	06/06/08
Matrix:	Filtrate	Analyzed:	06/10/08
Units:	ug/L		

Analyte	Result	RL	MDL	Diln Fac	Batch#	Prepared	Prep	Analysis
Aluminum	32 J	100	3.7	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Antimony	0.12 J	1.0	0.072	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Arsenic	3.6 J	5.0	0.11	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Barium	67	10	0.071	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Beryllium	0.092 J	2.0	0.053	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Cadmium	ND	5.0	0.041	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Calcium	92,000	500	8.7	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Chromium	0.83 J	10	0.11	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Cobalt	0.044 J	1.0	0.033	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Copper	1.1 J	10	0.18	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Iron	35,000	100	11	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Lead	20	3.0	0.073	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Magnesium	170,000	5,000	1,100	500.0	139052	06/09/08	EPA 200.8	EPA 6020
Manganese	2,000	10	0.98	50.00	139052	06/09/08	EPA 200.8	EPA 6020
Mercury	ND	0.20	0.045	1.000	139101	06/10/08	METHOD	EPA 7470A
Molybdenum	ND	20	0.18	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Nickel	0.62 J	20	0.16	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Potassium	63,000	500	17	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Selenium	0.13 J	5.0	0.074	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Silver	ND	5.0	0.027	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Sodium	1,500,000	6,000	2,000	500.0	139052	06/09/08	EPA 200.8	EPA 6020
Thallium	ND	5.0	0.019	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Vanadium	0.60 J	10	0.070	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Zinc	ND	20	1.6	5.000	139052	06/09/08	EPA 200.8	EPA 6020

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	203802	Project#:	ALAMEDA
Client:	Innovative Technical Solutions,Inc.	Location:	Alameda Basewide
Field ID:	OU2B-MW02-A7401	Sampled:	06/05/08
Lab ID:	203802-002	Received:	06/06/08
Matrix:	Filtrate	Analyzed:	06/10/08
Units:	ug/L		

Analyte	Result	RL	MDL	Diln Fac	Batch#	Prepared	Prep	Analysis
Aluminum	110	100	3.7	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Antimony	ND	1.0	0.072	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Arsenic	1.1 J	5.0	0.11	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Barium	42	10	0.071	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Beryllium	0.49 J	2.0	0.053	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Cadmium	0.056 J	5.0	0.041	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Calcium	210,000	500	87	50.00	139052	06/09/08	EPA 200.8	EPA 6020
Chromium	3.5 J	10	0.11	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Cobalt	0.045 J	1.0	0.033	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Copper	0.47 J	10	0.18	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Iron	19,000	100	11	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Lead	50	3.0	0.073	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Magnesium	580,000	500	110	50.00	139052	06/09/08	EPA 200.8	EPA 6020
Manganese	1,100	10	0.98	50.00	139052	06/09/08	EPA 200.8	EPA 6020
Mercury	ND	0.20	0.045	1.000	139101	06/10/08	METHOD	EPA 7470A
Molybdenum	ND	20	0.18	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Nickel	0.50 J	20	0.16	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Potassium	200,000	5,000	1,700	500.0	139052	06/09/08	EPA 200.8	EPA 6020
Selenium	0.31 J	5.0	0.074	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Silver	ND	5.0	0.027	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Sodium	4,700,000	6,000	2,000	500.0	139052	06/09/08	EPA 200.8	EPA 6020
Thallium	ND	5.0	0.019	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Vanadium	2.4 J	10	0.070	5.000	139052	06/09/08	EPA 200.8	EPA 6020
Zinc	ND	20	1.6	5.000	139052	06/09/08	EPA 200.8	EPA 6020

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 200.8
Project#:	ALAMEDA	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC445591	Batch#:	139052
Matrix:	Water	Prepared:	06/09/08
Units:	ug/L	Analyzed:	06/10/08

Analyte	Result	RL	MDL
Aluminum	28 J	100	0.74
Antimony	ND	1.0	0.014
Arsenic	0.031 J	5.0	0.022
Barium	0.17 J	10	0.014
Beryllium	ND	2.0	0.011
Cadmium	ND	5.0	0.0082
Calcium	110 J	500	1.7
Chromium	0.25 J	10	0.022
Cobalt	ND	1.0	0.0066
Copper	0.31 J	10	0.036
Iron	ND	100	2.3
Lead	ND	3.0	0.015
Magnesium	2.4 J	500	2.1
Manganese	0.060 J	10	0.020
Molybdenum	0.054 J	20	0.035
Nickel	0.10 J	20	0.033
Potassium	13 J	500	3.3
Selenium	ND	5.0	0.015
Silver	ND	5.0	0.0055
Sodium	ND	500	4.0
Thallium	ND	5.0	0.0039
Vanadium	0.20 J	10	0.014
Zinc	ND	20	0.32

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 200.8
Project#:	ALAMEDA	Analysis:	EPA 6020
Matrix:	Water	Batch#:	139052
Units:	ug/L	Prepared:	06/09/08
Diln Fac:	1.000	Analyzed:	06/10/08

Type: BS Lab ID: QC445592

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	9,853	99	75-125
Antimony	100.0	101.7	102	75-125
Arsenic	100.0	100.3	100	75-125
Barium	100.0	101.2	101	75-125
Beryllium	100.0	107.4	107	75-125
Cadmium	100.0	98.61	99	75-125
Calcium	10,000	10,260	103	75-125
Chromium	100.0	105.6	106	75-125
Cobalt	100.0	106.4	106	75-125
Copper	100.0	105.9	106	75-125
Iron	10,000	10,860	109	75-125
Lead	100.0	102.4	102	75-125
Magnesium	10,000	9,766	98	75-125
Manganese	100.0	104.6	105	75-125
Molybdenum	100.0	104.2	104	75-125
Nickel	100.0	106.4	106	75-125
Potassium	10,000	10,230	102	75-125
Selenium	100.0	101.9	102	75-125
Silver	100.0	99.84	100	75-125
Sodium	10,000	10,340	103	75-125
Thallium	50.00	51.56	103	75-125
Vanadium	100.0	103.7	104	75-125
Zinc	100.0	96.20	96	75-125

Type: BSD Lab ID: QC445593

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,706	97	75-125	2	20
Antimony	100.0	98.99	99	75-125	3	20
Arsenic	100.0	98.09	98	75-125	2	20
Barium	100.0	97.06	97	75-125	4	20
Beryllium	100.0	105.1	105	75-125	2	20
Cadmium	100.0	96.41	96	75-125	2	20
Calcium	10,000	10,080	101	75-125	2	20
Chromium	100.0	104.6	105	75-125	1	20
Cobalt	100.0	105.8	106	75-125	1	20
Copper	100.0	106.0	106	75-125	0	20
Iron	10,000	10,380	104	75-125	5	20
Lead	100.0	98.88	99	75-125	3	20
Magnesium	10,000	9,574	96	75-125	2	20
Manganese	100.0	103.1	103	75-125	1	20
Molybdenum	100.0	101.1	101	75-125	3	20
Nickel	100.0	105.8	106	75-125	1	20
Potassium	10,000	10,110	101	75-125	1	20
Selenium	100.0	97.51	98	75-125	4	20
Silver	100.0	99.47	99	75-125	0	20
Sodium	10,000	10,240	102	75-125	1	20
Thallium	50.00	50.24	100	75-125	3	20
Vanadium	100.0	103.3	103	75-125	0	20
Zinc	100.0	96.11	96	75-125	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 200.8
Project#:	ALAMEDA	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Sampled:	06/05/08
MSS Lab ID:	203763-006	Received:	06/05/08
Matrix:	Filtrate	Prepared:	06/09/08
Units:	ug/L	Analyzed:	06/10/08
Batch#:	139052		

Type: MS Lab ID: QC445596

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac
Aluminum	43.01	10,000	9,395	94	78-120	5.000
Antimony	0.1395	100.0	95.70	96	76-120	5.000
Arsenic	1.025	100.0	100.7	100	80-120	5.000
Barium	212.2	100.0	288.0	76	73-121	5.000
Beryllium	0.07100	100.0	97.70	98	80-120	5.000
Cadmium	0.09200	100.0	93.30	93	79-120	5.000
Calcium	122,800	10,000	121,900	-9 NM	67-128	20.00
Chromium	0.4660	100.0	100.4	100	77-120	5.000
Cobalt	0.8110	100.0	100.9	100	78-120	5.000
Copper	0.7735	100.0	96.85	96	71-120	5.000
Iron	147.4	10,000	10,330	102	74-125	5.000
Lead	0.1040	100.0	94.45	94	77-120	5.000
Magnesium	39,540	10,000	45,750	62 *	68-125	5.000
Manganese	997.0	100.0	1,006 >LR	9 NM	77-120	5.000
Molybdenum	6.415	100.0	100.2	94	76-120	5.000
Nickel	2.158	100.0	103.0	101	72-122	5.000
Potassium	1,685	10,000	11,180	95	76-120	5.000
Selenium	0.08750	100.0	100.1	100	73-123	5.000
Silver	0.07150	100.0	91.05	91	69-120	5.000
Sodium	22,380	10,000	30,030	77	70-124	5.000
Thallium	0.09750	50.00	39.38	79	74-120	5.000
Vanadium	0.8130	100.0	99.45	99	80-120	5.000
Zinc	6.250	100.0	93.65	87	62-131	5.000

*= Value outside of QC limits; see narrative
NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 200.8
Project#:	ALAMEDA	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Sampled:	06/05/08
MSS Lab ID:	203763-006	Received:	06/05/08
Matrix:	Filtrate	Prepared:	06/09/08
Units:	ug/L	Analyzed:	06/10/08
Batch#:	139052		

Type: MSD Lab ID: QC445597

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
Aluminum	10,000	9,240	92	78-120	2	20	5.000
Antimony	100.0	93.75	94	76-120	2	20	5.000
Arsenic	100.0	94.80	94	80-120	6	20	5.000
Barium	100.0	295.4	83	73-121	3	20	5.000
Beryllium	100.0	97.20	97	80-120	1	20	5.000
Cadmium	100.0	92.95	93	79-120	0	20	5.000
Calcium	10,000	126,400	36 NM	67-128	4	33	20.00
Chromium	100.0	98.80	98	77-120	2	20	5.000
Cobalt	100.0	100.0	99	78-120	1	20	5.000
Copper	100.0	95.80	95	71-120	1	21	5.000
Iron	10,000	10,030	99	74-125	3	22	5.000
Lead	100.0	93.85	94	77-120	1	20	5.000
Magnesium	10,000	46,790	73	68-125	2	20	5.000
Manganese	100.0	1,044 >LR	47 NM	77-120	NC	20	5.000
Molybdenum	100.0	98.40	92	76-120	2	21	5.000
Nickel	100.0	101.8	100	72-122	1	20	5.000
Potassium	10,000	11,040	94	76-120	1	20	5.000
Selenium	100.0	98.85	99	73-123	1	20	5.000
Silver	100.0	90.80	91	69-120	0	20	5.000
Sodium	10,000	30,650	83	70-124	2	20	5.000
Thallium	50.00	38.14	76	74-120	3	20	5.000
Vanadium	100.0	98.80	98	80-120	1	20	5.000
Zinc	100.0	91.45	85	62-131	2	33	5.000

*= Value outside of QC limits; see narrative
NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	EPA 200.8
Project#:	ALAMEDA	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Serial Dilution	Batch#:	139052
MSS Lab ID:	203763-006	Sampled:	06/05/08
Lab ID:	QC445598	Received:	06/05/08
Matrix:	Filtrate	Analyzed:	06/10/08

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac
Aluminum	43.01	100.0	63.10 J	250.0	NC	10	25.00
Antimony	0.1395	1.000	ND	2.500	NC	10	25.00
Arsenic	1.025	5.000	1.353 J	5.000	NC	10	25.00
Barium	212.2	10.00	212.6	10.00	0	10	25.00
Beryllium	0.07100	2.000	ND	2.500	NC	10	25.00
Cadmium	0.09200	5.000	ND	5.000	NC	10	25.00
Calcium	122,800	500.0	127,200	1,000	4	10	100.0
Chromium	0.4660	10.00	ND	10.00	NC	10	25.00
Cobalt	0.8110	1.000	0.7625 J	2.500	NC	10	25.00
Copper	0.7735	10.00	9.080 J	10.00	NC	10	25.00
Iron	147.4	100.0	132.6 J	250.0	NC	10	25.00
Lead	0.1040	3.000	0.6175 J	3.000	NC	10	25.00
Magnesium	39,540	500.0	39,780	500.0	1	10	25.00
Manganese	997.0	10.00	990.3	10.00	1	10	25.00
Molybdenum	6.415	20.00	6.643 J	20.00	NC	10	25.00
Nickel	2.158	20.00	1.830 J	20.00	NC	10	25.00
Potassium	1,685	500.0	1,665	500.0	1	10	25.00
Selenium	0.08750	5.000	ND	5.000	NC	10	25.00
Silver	0.07150	5.000	ND	5.000	NC	10	25.00
Sodium	22,380	500.0	21,700	500.0	3	10	25.00
Thallium	0.09750	5.000	ND	5.000	NC	10	25.00
Vanadium	0.8130	10.00	0.9025 J	10.00	NC	10	25.00
Zinc	6.250	20.00	ND	24.08	NC	10	25.00

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	METHOD
Project#:	ALAMEDA	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	139101
Lab ID:	QC445823	Prepared:	06/10/08
Matrix:	Water	Analyzed:	06/10/08
Units:	ug/L		

Result	RL	MDL
ND	0.20	0.045

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	METHOD
Project#:	ALAMEDA	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	139101
Matrix:	Water	Prepared:	06/10/08
Units:	ug/L	Analyzed:	06/10/08
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC445824	5.000	4.200	84	80-120		
BSD	QC445825	5.000	4.300	86	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	METHOD
Project#:	ALAMEDA	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	139101
MSS Lab ID:	203760-002	Sampled:	06/04/08
Lab ID:	QC445826	Received:	06/05/08
Matrix:	Filtrate	Analyzed:	06/10/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	METHOD
Project#:	ALAMEDA	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	139101
Field ID:	ZZZZZZZZZZ	Sampled:	06/04/08
MSS Lab ID:	203760-002	Received:	06/05/08
Matrix:	Filtrate	Prepared:	06/10/08
Units:	ug/L	Analyzed:	06/10/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC445827	<0.04502	5.000	4.510	90	77-126		
MSD	QC445828		5.000	4.380	88	77-126	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	METHOD
Project#:	ALAMEDA	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	139101
MSS Lab ID:	203799-001	Sampled:	06/05/08
Lab ID:	QC445829	Received:	06/06/08
Matrix:	Filtrate	Analyzed:	06/10/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	METHOD
Project#:	ALAMEDA	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	139101
Field ID:	ZZZZZZZZZZ	Sampled:	06/05/08
MSS Lab ID:	203799-001	Received:	06/06/08
Matrix:	Filtrate	Prepared:	06/10/08
Units:	ug/L	Analyzed:	06/10/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC445830	<0.04502	5.000	4.620	92	77-126		
MSD	QC445831		5.000	4.280	86	77-126	8	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	METHOD
Project#:	ALAMEDA	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	OU2B-MW01-A7400	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	139101
MSS Lab ID:	203802-001	Sampled:	06/05/08
Lab ID:	QC445832	Received:	06/06/08
Matrix:	Filtrate	Analyzed:	06/10/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	METHOD
Project#:	ALAMEDA	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	139101
Field ID:	OU2B-MW01-A7400	Sampled:	06/05/08
MSS Lab ID:	203802-001	Received:	06/06/08
Matrix:	Filtrate	Prepared:	06/10/08
Units:	ug/L	Analyzed:	06/10/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC445833	<0.04502	5.000	4.780	96	77-126		
MSD	QC445834		5.000	4.830	97	77-126	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	METHOD
Project#:	ALAMEDA	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	L05-05-A7415	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	139101
MSS Lab ID:	203836-002	Sampled:	06/09/08
Lab ID:	QC445835	Received:	06/09/08
Matrix:	Filtrate	Analyzed:	06/10/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	203802	Location:	Alameda Basewide
Client:	Innovative Technical Solutions,Inc.	Prep:	METHOD
Project#:	ALAMEDA	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	139101
Field ID:	L05-05-A7415	Sampled:	06/09/08
MSS Lab ID:	203836-002	Received:	06/09/08
Matrix:	Filtrate	Prepared:	06/10/08
Units:	ug/L	Analyzed:	06/10/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC445836	<0.04502	5.000	4.460	89	77-126		
MSD	QC445837		5.000	4.510	90	77-126	1	20

RPD= Relative Percent Difference

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET16
Seqnum : 898232551101
File : f0910101
IDF : 5.0
Lab ID : 203763-006
Matrix : Filtrate
Batch : 139052
Time : 10-JUN-2008 08:01
Cal : 898232551001
Units : ug/L

Type : PDS
Inst : MET16
Seqnum : 898232551110
File : f0910110
IDF : 5.0
Lab ID : QC445599
Matrix : Filtrate
Batch : 139052
Time : 10-JUN-2008 09:48
Cal : 898232551001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S8777 (100X), S8778 (100X), S9405

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	8.602	A	10000	8913	A	89	75-125	u
Antimony	0.02790	A	100.0	91.72	A	92	75-125	!<a+ u
Arsenic	0.2050	E	100.0	94.46	E	94	75-125	!<a+ u
Barium	42.43	A	100.0	132.5	A	90	75-125	!<a+ u
Beryllium	0.01420	A	100.0	93.72	A	94	75-125	!<a+ u
Cadmium	0.01840	A	100.0	89.67	A	90	75-125	!<a+ u
Chromium	0.09320	E	100.0	95.81	E	96	75-125	!<a+ u
Cobalt	0.1622	E	100.0	96.16	E	96	75-125	!<a+ u
Copper	0.1547	E	100.0	92.17	E	92	75-125	!<a+ u
Iron	29.48	H	10000	9707	H	97	75-125	u
Lead	0.02080	A	100.0	91.94	A	92	75-125	!<a+ u
Magnesium	7908	A	10000	16410	A	85	75-125	u
Manganese	199.4	E	100.0	289.6 >LR	E	90	75-125	!<a+ >LR b*
Molybdenum	1.283	A	100.0	95.24	A	94	75-125	u
Nickel	0.4315	E	100.0	95.78	E	95	75-125	!<a+ u
Potassium	336.9	A	10000	9518	A	92	75-125	u
Selenium	0.01750	H	100.0	94.14	H	94	75-125	!<a+ u
Silver	0.01430	A	100.0	96.14	A	96	75-125	!<a+ u
Sodium	4475	E	10000	13470	E	90	75-125	u
Thallium	0.01950	A	50.00	46.57	A	93	75-125	!<a+ !<ib !>ib u
Vanadium	0.1626	E	100.0	96.32	E	96	75-125	!<a+ u
Zinc	1.250	E	100.0	89.52	E	88	75-125	!<a+ u

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	2192151	1914893	-12.65
Scandium	A	2975662	2882127	-3.14
Scandium	E	29938	25232	-15.72
Scandium	H	914259	780417	-14.64
Germanium	H	243670	211710	-13.12
Germanium	E	24961	21616	-13.40
Indium	A	4254937	3922031	-7.82
Bismuth	A	2768004	2482245	-10.32
Yttrium	A	4781284	4588998	-4.02
Terbium	A	5096586	4823579	-5.36

!=warning +=high bias <=opening >=closing >LR=overrange a=ICSA b=noncompliant ib=instrument blank u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type	: MSS	Type	: PDS
Inst	: MET16	Inst	: MET16
Seqnum	: 898232551141	Seqnum	: 898232551145
File	: f0910141	File	: f0910145
IDF	: 20.0	IDF	: 20.0
Lab ID	: 203763-006	Lab ID	: QC445599
Matrix	: Filtrate	Matrix	: Filtrate
Batch	: 139052	Batch	: 139052
Time	: 10-JUN-2008 16:10	Time	: 10-JUN-2008 16:59
Cal	: 898232551001	Cal	: 898232551001
Units	: ug/L		

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S8777 (100X), S8778 (100X), S9405

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	ND	A	10000	8983	A	90	75-125	!<ib
Antimony	ND	A	100.0	89.08	A	89	75-125	!<a+ !<ib
Arsenic	0.05160	E	100.0	92.65	E	93	75-125	!<a+ !<ib
Barium	10.91	A	100.0	101.9	A	91	75-125	!<a+ !<ib
Beryllium	ND	A	100.0	94.51	A	95	75-125	!<a+ !<ib
Cadmium	ND	A	100.0	89.89	A	90	75-125	!<a+ !<ib
Calcium	6141	A	10000	15140	A	90	75-125	u
Chromium	ND	E	100.0	94.89	E	95	75-125	!<a+ !<ib
Cobalt	0.02830	E	100.0	96.29	E	96	75-125	!<a+ !<ib
Copper	0.3061	E	100.0	90.20	E	90	75-125	!<a+ !<ib
Iron	6.889	H	10000	9593	H	96	75-125	!<ib
Lead	ND	A	100.0	90.11	A	90	75-125	!<a+ !<ib
Magnesium	2025	A	10000	10850	A	88	75-125	!<ib
Manganese	50.41	E	100.0	142.3	E	92	75-125	!<a+ !<ib u
Molybdenum	0.3279	A	100.0	92.75	A	92	75-125	
Nickel	0.1086	E	100.0	95.45	E	95	75-125	!<a+ !<ib
Potassium	89.27	A	10000	9348	A	93	75-125	!<ib
Selenium	ND	H	100.0	94.17	H	94	75-125	!<a+ !<ib
Silver	ND	A	100.0	96.90	A	97	75-125	!<a+ !<ib
Sodium	1106	E	10000	9911	E	88	75-125	
Thallium	ND	A	50.00	46.95	A	94	75-125	!<a+ !<ib
Vanadium	0.03630	E	100.0	95.37	E	95	75-125	!<a+ !<ib
Zinc	0.4400	E	100.0	88.74	E	88	75-125	!<a+

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	2192151	1797537	-18.00
Scandium	A	2975662	2739909	-7.92
Scandium	E	29938	24013	-19.79
Scandium	H	914259	756647	-17.24
Germanium	H	243670	206567	-15.23
Germanium	E	24961	21056	-15.64
Indium	A	4254937	3699407	-13.06
Bismuth	A	2768004	2275512	-17.79
Yttrium	A	4781284	4329623	-9.45
Terbium	A	5096586	4497538	-11.75

!=warning +=high bias <=opening a=ICSA ib=instrument blank u=use

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 203802 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	MO	NI	K	SE	AG	NA	TL	V	ZN
203802-001	MET16	06/10/08 13:07	5.0	+	+	+	+	+	+	+	+	+	+	+	+				+	+	+	+	+		+	+	+
203802-001	MET14	06/10/08 14:58	1.0															+									
203802-001	MET16	06/10/08 18:00	500.0													+								+			
203802-001	MET16	06/10/08 18:25	50.0														+										
203802-002	MET16	06/10/08 13:19	5.0	+	+	+	+	+	+		+	+	+	+	+				+	+		+	+		+	+	+
203802-002	MET14	06/10/08 16:10	1.0															+									
203802-002	MET16	06/10/08 18:13	500.0																		+			+			
203802-002	MET16	06/10/08 18:37	50.0							+						+	+										
QC445591	MET16	06/10/08 06:48	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC445591	MET16	06/10/08 17:48	1.0																								
QC445592	MET16	06/10/08 07:00	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC445593	MET16	06/10/08 07:12	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC445594	MET16	06/10/08 07:36	5.0	+	+	+	+	+	+		+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC445594	MET16	06/10/08 15:46	50.0							+																	
QC445595	MET16	06/10/08 07:48	5.0	+	+	+	+	+	+		+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC445595	MET16	06/10/08 15:58	50.0							+																	
QC445596	MET16	06/10/08 09:23	5.0	+	+	+	+	+	+		+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC445596	MET16	06/10/08 16:35	20.0							+																	
QC445597	MET16	06/10/08 09:36	5.0	+	+	+	+	+	+		+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC445597	MET16	06/10/08 16:47	20.0							+																	
QC445598	MET16	06/10/08 08:13	25.0	+	+	+	+	+	+		+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC445598	MET16	06/10/08 16:22	100.0							+																	
QC445599	MET16	06/10/08 09:48	5.0	+	+	+	+	+	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+	+
QC445599	MET16	06/10/08 16:59	20.0							+							+										
QC445823	MET14	06/10/08 14:28	1.0															+									
QC445824	MET14	06/10/08 14:31	1.0															+									
QC445825	MET14	06/10/08 14:33	1.0															+									
QC445826	MET14	06/10/08 14:37	5.0															+									
QC445827	MET14	06/10/08 14:40	1.0															+									
QC445828	MET14	06/10/08 14:42	1.0															+									
QC445829	MET14	06/10/08 14:46	5.0															+									

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 203802 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALB	SBS	ABA	BEA	CDA	CAR	CCO	CUE	FEB	PBG	MGN	MNG	HGO	NIK	SEG	AGN	TAL	VZN
QC445830	MET14	06/10/08 14:49	1.0												+						
QC445831	MET14	06/10/08 14:55	1.0												+						
QC445832	MET14	06/10/08 15:00	5.0												+						
QC445833	MET14	06/10/08 15:02	1.0												+						
QC445834	MET14	06/10/08 15:05	1.0												+						
445835	MET14	06/10/08 15:09	5.0												+						
QC445836	MET14	06/10/08 15:11	1.0												+						
QC445837	MET14	06/10/08 15:13	1.0												+						

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 898232551 Instrument: MET16 Agilent ICP-MS MET16 Begun: 09-JUN-2008
Analytical Method: EPA 6020 SOP Version: icpms_rv5

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	f0910001	TUN				09-JUN-2008 11:51	1.0	1.0				1	
002	f0910002	X	RINSE			09-JUN-2008 11:57	1.0					2	
003	f0910003	ICALBLK	CALBLANK			09-JUN-2008 12:09	1.0	1.0				2	
004	f0910004	ICAL				09-JUN-2008 12:21	1.0	1.0				3 2	
005	f0910005	ICAL				09-JUN-2008 12:34	1.0	1.0				4 2	
006	f0910006	ICAL				09-JUN-2008 12:46	1.0	1.0				5 2	
007	f0910007	ICAL				09-JUN-2008 12:58	1.0	1.0				6 2	
008	f0910008	ICAL				09-JUN-2008 13:10	1.0	1.0				7 2	
009	f0910009	ICAL				09-JUN-2008 13:22	1.0	1.0				8 2	
010	f0910010	ICV				09-JUN-2008 13:33	1.0	1.0			1	9 2	
011	f0910011	ICB				09-JUN-2008 13:51	1.0	1.0	1		1	2	
012	f0910012	X				09-JUN-2008 14:01	1.0					2	
013	f0910013	ICSA				09-JUN-2008 14:14	1.0	1.0			1	10 2	7:CA=303400
014	f0910014	ICSAB				09-JUN-2008 14:26	1.0	1.0			1	11 2	7:CA=291800
015	f0910015	X	RINSE			09-JUN-2008 14:38	1.0					2	
016	f0910016	X	RINSE			09-JUN-2008 14:50	1.0					2	
017	f0910017	SAMPLE	203735-006	138993	Filtra	09-JUN-2008 15:03	10.0	1.0			1	2	
018	f0910018	SAMPLE	203735-007	138993	Filtra	09-JUN-2008 15:16	10.0	1.0			1	2	
019	f0910019	SAMPLE	203736-008	138995	Filtra	09-JUN-2008 15:28	50.0	1.0			1	2	
020	f0910020	SAMPLE	203736-009	138995	Filtra	09-JUN-2008 15:41	50.0	1.0			1	2	
021	f0910021	SAMPLE	203736-010	138995	Filtra	09-JUN-2008 15:53	50.0	1.0			1	2	
022	f0910022	SAMPLE	203739-009	138971	Soil	09-JUN-2008 16:05	50.0	48.54			1	2	1:MN=586.300
023	f0910023	CCV				09-JUN-2008 16:17	1.0	1.0			1	12 2	
024	f0910024	X				09-JUN-2008 16:29	1.0					2	
025	f0910025	CCB				09-JUN-2008 16:44	1.0	1.0	1		1	2	
026	f0910026	ICSA				09-JUN-2008 16:56	1.0	1.0			1	10 2	7:CA=305900
027	f0910027	ICSAB				09-JUN-2008 17:08	1.0	1.0			1	11 2	7:CA=291200
028	f0910028	X	RINSE			09-JUN-2008 17:21	1.0					2	
029	f0910029	X	RINSE			09-JUN-2008 17:33	1.0					2	
030	f0910030	BS	QC445393	138997	Water	09-JUN-2008 17:45	1.0	1.0			1	2	
031	f0910031	BSD	QC445394	138997	Water	09-JUN-2008 17:57	1.0	1.0			1	2	

Stds used: 1=S9387 2=S9405 3=S9391 4=S9392 5=S9399 6=S9400 7=S9389 8=S9390 9=S9401 10=S9403 11=S9404 12=S9402 13=S8777 14=S8778

Analyst: _____ Date: 6/10/08

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 898232551 Instrument: MET16 Agilent ICP-MS MET16 Begun: 09-JUN-2008
Analytical Method: EPA 6020 SOP Version: icpms_rv5

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	f0910032	MSS	203732-001	138997	Water	09-JUN-2008 18:09	50.0	1.0			1	2	
033	f0910033	SER	QC445397	138997	Water	09-JUN-2008 18:21	250.0	1.0		1	1	2	
034	f0910034	MS	QC445395	138997	Water	09-JUN-2008 18:33	50.0	1.0		1	1	2	
035	f0910035	MSD	QC445396	138997	Water	09-JUN-2008 18:45	50.0	1.0		1	1	2	
036	f0910036	PDS	QC445398	138997	Water	09-JUN-2008 18:57	50.0	1.0			1	13 14 2	
037	f0910037	CCV				09-JUN-2008 19:09	1.0	1.0			1	12 2	
038	f0910038	X				09-JUN-2008 19:21	1.0					2	
039	f0910039	CCB				09-JUN-2008 19:34	1.0	1.0	1		1	2	
040	f0910040	MSS	203732-001	138997	Water	09-JUN-2008 19:46	5.0	1.0	1		1	2	1:CA=23760.0
041	f0910041	SER	QC445397	138997	Water	09-JUN-2008 19:58	25.0	1.0		1	1	2	
042	f0910042	MS	QC445395	138997	Water	09-JUN-2008 20:10	5.0	1.0			1	2	1:CA=25220.0
043	f0910043	MSD	QC445396	138997	Water	09-JUN-2008 20:22	5.0	1.0		1	1	2	1:CA=25360.0
044	f0910044	PDS	QC445398	138997	Water	09-JUN-2008 20:34	5.0	1.0			1	13 14 2	1:CA=32930.(
045	f0910045	SAMPLE	203716-004	138997	Water	09-JUN-2008 20:46	5.0	1.0			1	2	
046	f0910046	SAMPLE	203724-001	138997	Water	09-JUN-2008 20:58	5.0	1.0			1	2	3:CA=199900
047	f0910047	SAMPLE	203733-001	138997	Water	09-JUN-2008 21:10	5.0	1.0			1	2	1:CA=21410.0
048	f0910048	SAMPLE	203733-002	138997	Water	09-JUN-2008 21:23	5.0	1.0			1	2	1:CA=35210.0
049	f0910049	SAMPLE	203733-003	138997	Water	09-JUN-2008 21:35	5.0	1.0			1	2	
050	f0910050	CCV				09-JUN-2008 21:47	1.0	1.0			1	12 2	
051	f0910051	CCB				09-JUN-2008 21:59	1.0	1.0			1	2	
052	f0910052	X				09-JUN-2008 22:11	1.0					2	
053	f0910053	TUN				09-JUN-2008 22:24	1.0	1.0				1	
054	f0910054	X	RINSE			09-JUN-2008 22:30	1.0					2	
055	f0910055	SAMPLE	203733-001	138997	Filtra	09-JUN-2008 22:42	5.0	1.0			1	2	
056	f0910056	SAMPLE	203733-002	138997	Filtra	09-JUN-2008 22:54	5.0	1.0			1	2	1:CA=31900.0
057	f0910057	SAMPLE	203772-004	138997	Filtra	09-JUN-2008 23:06	5.0	1.0			1	2	1:MN=386.400
058	f0910058	SAMPLE	203772-005	138997	Filtra	09-JUN-2008 23:19	5.0	1.0			1	2	1:MN=286.700
059	f0910059	SAMPLE	203772-006	138997	Filtra	09-JUN-2008 23:31	5.0	1.0			1	2	
060	f0910060	SAMPLE	203772-007	138997	Filtra	09-JUN-2008 23:43	5.0	1.0			1	2	1:MN=666.600
061	f0910061	CCV				09-JUN-2008 23:55	1.0	1.0			1	12 2	
062	f0910062	X				10-JUN-2008 00:07	1.0					2	

Stds used: 1=S9387 2=S9405 3=S9391 4=S9392 5=S9399 6=S9400 7=S9389 8=S9390 9=S9401 10=S9403 11=S9404 12=S9402 13=S8777 14=S8778

Analyst: _____ Date: 6/10/08

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 898232551 Instrument: MET16 Agilent ICP-MS MET16 Begun: 09-JUN-2008
Analytical Method: EPA 6020 SOP Version: icpms_rv5

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	f0910063	CCB				10-JUN-2008 00:19	1.0	1.0	1		1	2	
064	f0910064	ICSA				10-JUN-2008 00:31	1.0	1.0			1	10 2	7:CA=302300
065	f0910065	ICSAB				10-JUN-2008 00:44	1.0	1.0			1	11 2	7:CA=290200
066	f0910066	X	RINSE			10-JUN-2008 00:56	1.0					2	
067	f0910067	X	RINSE			10-JUN-2008 01:08	1.0					2	
068	f0910068	BLANK	QC445403	138999	Filtra	10-JUN-2008 01:20	1.0	1.0			1	2	
069	f0910069	MSS	203769-009	138999	Filtra	10-JUN-2008 01:33	5.0	1.0	3		1	2	3:NA=40250.0
070	f0910070	SER	QC445408	138999	Filtra	10-JUN-2008 01:45	25.0	1.0			1	2	
071	f0910071	MS	QC445406	138999	Filtra	10-JUN-2008 01:57	5.0	1.0			1	2	3:NA=40750.0
072	f0910072	MSD	QC445407	138999	Filtra	10-JUN-2008 02:09	5.0	1.0			1	2	3:NA=38300.0
073	f0910073	PDS	QC445409	138999	Filtra	10-JUN-2008 02:21	5.0	1.0	2		1	13 14 2	5:NA=47840.(
074	f0910074	SAMPLE	203769-001	138999	Filtra	10-JUN-2008 02:33	5.0	1.0			1	2	
075	f0910075	SAMPLE	203769-002	138999	Filtra	10-JUN-2008 02:45	5.0	1.0			1	2	
076	f0910076	CCV				10-JUN-2008 02:57	1.0	1.0			1	12 2	
077	f0910077	X				10-JUN-2008 03:09	1.0					2	
078	f0910078	CCB				10-JUN-2008 03:21	1.0	1.0	1		1	2	
079	f0910079	SAMPLE	203769-003	138999	Filtra	10-JUN-2008 03:33	5.0	1.0			1	2	
080	f0910080	SAMPLE	203769-004	138999	Filtra	10-JUN-2008 03:46	5.0	1.0			1	2	
081	f0910081	SAMPLE	203769-005	138999	Filtra	10-JUN-2008 03:58	5.0	1.0			1	2	
082	f0910082	SAMPLE	203769-006	138999	Filtra	10-JUN-2008 04:10	5.0	1.0			1	2	
083	f0910083	SAMPLE	203769-007	138999	Filtra	10-JUN-2008 04:22	5.0	1.0			1	2	
084	f0910084	SAMPLE	203769-008	138999	Filtra	10-JUN-2008 04:34	5.0	1.0			1	2	3:NA=39110.0
085	f0910085	SAMPLE	203769-011	138999	Filtra	10-JUN-2008 04:46	5.0	1.0			1	2	
086	f0910086	SAMPLE	203773-001	138999	Filtra	10-JUN-2008 04:58	5.0	1.0			1	2	
087	f0910087	SAMPLE	203773-002	138999	Filtra	10-JUN-2008 05:11	5.0	1.0			1	2	
088	f0910088	CCV				10-JUN-2008 05:23	1.0	1.0			1	12 2	
089	f0910089	X				10-JUN-2008 05:35	1.0					2	
090	f0910090	CCB				10-JUN-2008 05:47	1.0	1.0	1		1	2	
091	f0910091	ICSA				10-JUN-2008 05:59	1.0	1.0			1	10 2	7:CA=298300
092	f0910092	ICSAB				10-JUN-2008 06:11	1.0	1.0			1	11 2	7:CA=286500
093	f0910093	X	RINSE			10-JUN-2008 06:24	1.0					2	

Stds used: 1=S9387 2=S9405 3=S9391 4=S9392 5=S9399 6=S9400 7=S9389 8=S9390 9=S9401 10=S9403 11=S9404 12=S9402 13=S8777 14=S8778

Analyst: _____ Date: 6/10/08

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 898232551 Instrument: MET16 Agilent ICP-MS MET16 Begun: 09-JUN-2008
Analytical Method: EPA 6020 SOP Version: icpms_rv5

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	f0910094	X	RINSE			10-JUN-2008 06:36	1.0					2	
095	f0910095	BLANK	QC445591	139052	Water	10-JUN-2008 06:48	1.0	1.0	1		1	2	
096	f0910096	BS	QC445592	139052	Water	10-JUN-2008 07:00	1.0	1.0			1	2	
097	f0910097	BSD	QC445593	139052	Water	10-JUN-2008 07:12	1.0	1.0			1	2	
098	f0910098	MSS	203763-006	139052	Water	10-JUN-2008 07:24	5.0	1.0	2		1	2	2:CA=39310.0
099	f0910099	MS	QC445594	139052	Water	10-JUN-2008 07:36	5.0	1.0			1	2	2:CA=40390.0
100	f0910100	MSD	QC445595	139052	Water	10-JUN-2008 07:48	5.0	1.0			1	2	2:CA=39250.0
101	f0910101	MSS	203763-006	139052	Filtra	10-JUN-2008 08:01	5.0	1.0	1		1	2	1:CA=24290.0
102	f0910102	SER	QC445598	139052	Filtra	10-JUN-2008 08:13	25.0	1.0			1	2	
103	f0910103	CCV				10-JUN-2008 08:25	1.0	1.0			1	12 2	
104	f0910104	X				10-JUN-2008 08:37	1.0					2	
105	f0910105	CCB				10-JUN-2008 08:52	1.0	1.0	1		1	2	
106	f0910106	TUN				10-JUN-2008 09:05	1.0	1.0				1	
107	f0910107	X	RINSE			10-JUN-2008 09:11	1.0					2	
108	f0910108	MS	QC445596	139052	Filtra	10-JUN-2008 09:23	5.0	1.0		1	1	2	2:CA=24040.0
109	f0910109	MSD	QC445597	139052	Filtra	10-JUN-2008 09:36	5.0	1.0			1	2	2:CA=24650.0
110	f0910110	PDS	QC445599	139052	Filtra	10-JUN-2008 09:48	5.0	1.0	1		1	13 14 2	2:CA=32680.(
111	f0910111	SAMPLE	203763-005	139052	Water	10-JUN-2008 10:00	5.0	1.0			1	2	1:NA=42000.0
112	f0910112	SAMPLE	203763-007	139052	Water	10-JUN-2008 10:12	5.0	1.0			1	2	1:CA=26940.0
113	f0910113	SAMPLE	203763-008	139052	Water	10-JUN-2008 10:24	5.0	1.0			1	2	1:CA=27960.0
114	f0910114	SAMPLE	203764-001	139052	Water	10-JUN-2008 10:36	5.0	1.0			1	2	
115	f0910115	SAMPLE	203787-001	139052	Filtra	10-JUN-2008 10:49	5.0	1.0			1	2	1:NA=25970.0
116	f0910116	SAMPLE	203787-002	139052	Filtra	10-JUN-2008 11:01	5.0	1.0			1	2	1:NA=34250.0
117	f0910117	MSS	203763-006	139052	Filtra	10-JUN-2008 11:17	5.0	1.0	2		1	2	2:CA=24090.0
118	f0910118	CCV				10-JUN-2008 11:30	1.0	1.0			1	12 2	
119	f0910119	X				10-JUN-2008 11:42	1.0					2	
120	f0910120	CCB				10-JUN-2008 11:54	1.0	1.0	1		1	2	
121	f0910121	SAMPLE	203787-003	139052	Filtra	10-JUN-2008 12:06	5.0	1.0			1	2	1:NA=29470.0
122	f0910122	SAMPLE	203787-005	139052	Filtra	10-JUN-2008 12:18	5.0	1.0			1	2	2:NA=42450.0
123	f0910123	SAMPLE	203799-001	139052	Filtra	10-JUN-2008 12:30	5.0	1.0			1	2	
124	f0910124	SAMPLE	203799-002	139052	Filtra	10-JUN-2008 12:43	5.0	1.0			1	2	1:MN=345.300

Stds used: 1=S9387 2=S9405 3=S9391 4=S9392 5=S9399 6=S9400 7=S9389 8=S9390 9=S9401 10=S9403 11=S9404 12=S9402 13=S8777 14=S8778

Analyst: _____ Date: 6/10/08

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 898232551 Instrument: MET16 Agilent ICP-MS MET16 Begun: 09-JUN-2008
Analytical Method: EPA 6020 SOP Version: icpms_rv5

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
125	f0910125	SAMPLE	203799-003	139052	Filtra	10-JUN-2008 12:55	5.0	1.0			1	2	
126	f0910126	SAMPLE	203802-001	139052	Filtra	10-JUN-2008 13:07	5.0	1.0	3		1	2	3:NA=275100
127	f0910127	SAMPLE	203802-002	139052	Filtra	10-JUN-2008 13:19	5.0	1.0	5		1	2	5:NA=1045000
128	f0910128	SAMPLE	203763-005	139052	Filtra	10-JUN-2008 13:32	5.0	1.0			1	2	1:NA=66550.0
129	f0910129	SAMPLE	203763-007	139052	Filtra	10-JUN-2008 13:44	5.0	1.0			1	2	1:CA=25230.0
130	f0910130	SAMPLE	203763-008	139052	Filtra	10-JUN-2008 13:56	5.0	1.0			1	2	1:CA=25500.0
131	f0910131	CCV				10-JUN-2008 14:08	1.0	1.0			1	12 2	
132	f0910132	CCB				10-JUN-2008 14:20	1.0	1.0			1	2	
133	f0910133	X				10-JUN-2008 14:32	1.0					2	
134	f0910134	ICSA				10-JUN-2008 14:45	1.0	1.0			1	10 2	7:CA=298000
135	f0910135	ICSAB				10-JUN-2008 14:57	1.0	1.0			1	11 2	7:CA=287400
136	f0910136	X	RINSE			10-JUN-2008 15:09	1.0					2	
137	f0910137	X	RINSE			10-JUN-2008 15:21	1.0					2	
138	f0910138	MSS	203763-006	139052	Water	10-JUN-2008 15:34	50.0	1.0	1		1	2	
139	f0910139	MS	QC445594	139052	Water	10-JUN-2008 15:46	50.0	1.0		1	1	2	
140	f0910140	MSD	QC445595	139052	Water	10-JUN-2008 15:58	50.0	1.0		1	1	2	
141	f0910141	MSS	203763-006	139052	Filtra	10-JUN-2008 16:10	20.0	1.0			1	2	
142	f0910142	SER	QC445598	139052	Filtra	10-JUN-2008 16:22	100.0	1.0		1	1	2	
143	f0910143	MS	QC445596	139052	Filtra	10-JUN-2008 16:35	20.0	1.0		1	1	2	
144	f0910144	MSD	QC445597	139052	Filtra	10-JUN-2008 16:47	20.0	1.0		1	1	2	
145	f0910145	PDS	QC445599	139052	Filtra	10-JUN-2008 16:59	20.0	1.0			1	13 14 2	
146	f0910146	CCV				10-JUN-2008 17:11	1.0	1.0			1	12 2	
147	f0910147	X				10-JUN-2008 17:23	1.0					2	
148	f0910148	CCB				10-JUN-2008 17:36	1.0	1.0	1		1	2	
149	f0910149	BLANK	QC445591	139052	Water	10-JUN-2008 17:48	1.0	1.0	1		1	2	
150	f0910150	SAMPLE	203802-001	139052	Filtra	10-JUN-2008 18:00	500.0	1.0	1		1	2	
151	f0910151	SAMPLE	203802-002	139052	Filtra	10-JUN-2008 18:13	500.0	1.0	1		1	2	
152	f0910152	SAMPLE	203802-001	139052	Filtra	10-JUN-2008 18:25	50.0	1.0	1		1	2	1:NA=28460.0
153	f0910153	SAMPLE	203802-002	139052	Filtra	10-JUN-2008 18:37	50.0	1.0	1		1	2	1:NA=90580.0
154	f0910154	CCV				10-JUN-2008 18:49	1.0	1.0			1	12 2	
155	f0910155	X				10-JUN-2008 19:01	1.0					2	

Stds used: 1=S9387 2=S9405 3=S9391 4=S9392 5=S9399 6=S9400 7=S9389 8=S9390 9=S9401 10=S9403 11=S9404 12=S9402 13=S8777 14=S8778

Analyst: _____ Date: 6/10/08

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 898232551 Instrument: MET16 Agilent ICP-MS MET16 Begun: 09-JUN-2008
Analytical Method: EPA 6020 SOP Version: icpms_rv5

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
156	f0910156	CCB				10-JUN-2008 19:14	1.0	1.0	2		1	2	
157	f0910157	ICSA				10-JUN-2008 19:27	1.0	1.0			1	10 2	7:CA=294900
158	f0910158	TUN				10-JUN-2008 19:40	1.0	1.0				1	
159	f0910159	X	RINSE			10-JUN-2008 19:46	1.0					2	
160	f0910160	ICSAB				10-JUN-2008 19:58	1.0	1.0			1	11 2	7:CA=282500
161	f0910161	X	RINSE			10-JUN-2008 20:10	1.0					2	

Stds used: 1=S9387 2=S9405 3=S9391 4=S9392 5=S9399 6=S9400 7=S9389 8=S9390 9=S9401 10=S9403 11=S9404 12=S9402 13=S8777 14=S8778

Analyst: _____ Date: 6/10/08

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 898232551

Date : 06/09/08
Sequence : MET16 f0910

Reference : f0910003
Analyzed : 06/09/08 12:09

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	2192151	2975662	29938	914259	243670	24961	4254937	2768004	4781284	5096586
		LOWER LIMIT	657645	892699	8981	274278	73101	7488	1276481	830401	1434385	1528976
		UPPER LIMIT	2630581	3570794	35926	1097111	292404	29953	5105924	3321605	5737541	6115903
011	ICB		2253148	3104738	31402	938653	254923	26421	4296944	2761198	4925638	5173232
013	ICSA		1646446	2806715	29647	804186	206299	22720	3519362	2045381	4454531	4442475
014	ICSAB		1574337	2679346	28289	781336	201706	22098	3456514	2026518	4306651	4374351
017	SAMPLE	203735-006	2144167	3020227	28933	927772	250042	25047	4344699	2849916	4883216	5265670
018	SAMPLE	203735-007	2195182	3081846	30215	974941	263130	26133	4430558	2916214	4949752	5331081
019	SAMPLE	203736-008	2114171	2961528	29097	946430	253449	25122	4289359	2845037	4775177	5220969
020	SAMPLE	203736-009	2150633	2945819	29281	944125	254456	25246	4272387	2844979	4781900	5166794
021	SAMPLE	203736-010	2155233	2990494	29419	932022	250963	25416	4296392	2880867	4808598	5220715
022	SAMPLE	203739-009	2219174	3138271	30445	969845	251648	25257	4326785	2839606	5050570	5300674
023	CCV		2111887	2988045	29736	922797	244329	24782	4058486	2610327	4684555	4953557
025	CCB		2071617	2736354	30488	943199	255233	26005	3976993	2660367	4429082	478079
026	ICSA		1593884	2679753	29113	803713	206062	22485	3446764	2043431	4312592	4412093
027	ICSAB		1543409	2613567	26960	780554	201481	21148	3359470	2028949	4233349	4354423
030	BS	QC445393	2008243	2915318	28218	915427	239999	23444	4115655	2646566	4762626	5177415
031	BSD	QC445394	2056155	2983739	29511	935268	245716	24599	4198018	2716828	4865250	5247886
032	MSS	203732-001	2097164	2975140	29585	972166	261920	25886	4312566	2843386	4865393	5229612
033	SER	QC445397	2073980	2900467	29404	947432	258275	25467	4256583	2835047	4740714	5159674
034	MS	QC445395	2121799	2986590	30010	943615	256105	25903	4312216	2820737	4809956	5261860
035	MSD	QC445396	2093069	2906159	29835	952784	255508	25732	4253941	2835627	4786503	5221041
036	PDS	QC445398	2065274	2994826	29954	930082	247281	25231	4161984	2661255	4821607	5188014
037	CCV		2087497	3003956	30047	924094	244492	24947	4175785	2718300	4798985	5167131
039	CCB		2093200	2918529	29467	927970	250384	25481	4207698	2792202	4756316	5094664
040	MSS	203732-001	2140186	3002025	30203	922412	247623	25662	4195765	2706806	4792725	5154392
041	SER	QC445397	2135099	2950742	29925	926058	251275	26112	4257839	2831039	4751719	5230884
042	MS	QC445395	2125820	3010934	30061	915332	246274	25408	4217987	2729278	4802959	5176932
043	MSD	QC445396	2081518	2940507	29140	879468	238840	24780	4144059	2700178	4707824	5078656
044	PDS	QC445398	2049125	2966762	29377	894422	238981	24881	4125063	2629448	4795423	5149743
045	SAMPLE	203716-004	2146669	2993434	29804	933840	248392	25449	4255989	2805115	4817876	517769
046	SAMPLE	203724-001	2010023	2885891	28531	855262	225503	23599	3954898	2560808	4564474	4916932
047	SAMPLE	203733-001	2120520	2934432	29206	876516	236839	24880	4177208	2683638	4718306	5111897
048	SAMPLE	203733-002	2110393	3021835	29388	866905	235269	24897	4206043	2725064	4819091	5171215
049	SAMPLE	203733-003	2148705	2957195	29605	947410	252194	25427	4247136	2798202	4787069	5136674
050	CCV		2112129	3005662	29195	864858	233497	24744	4163324	2706257	4823177	5143296
051	CCB		2115695	2947212	29406	882331	239037	25214	4202084	2770751	4726887	5073804
055	SAMPLE	203733-001	2145878	3017213	29333	877200	240044	25239	4240856	2696858	4815509	5146140
056	SAMPLE	203733-002	2123756	2980187	29448	880208	238976	24967	4143095	2691805	4760422	5064848
057	SAMPLE	203772-004	2093480	2942756	28919	856722	235188	24741	4175722	2747145	4727275	5130602
058	SAMPLE	203772-005	2090113	2926088	28361	866053	234298	24380	4132793	2687680	4632636	5019168
059	SAMPLE	203772-006	2162827	3004106	29152	875314	239472	25061	4273777	2744906	4822063	5220040
060	SAMPLE	203772-007	2085986	2924747	28793	865353	235394	24740	4109788	2657932	4669540	5020793
061	CCV		2040664	2984674	29682	884859	238012	24986	4058838	2617904	4750021	4998735
063	CCB		2159109	3053738	29651	882576	242066	25425	4299678	2820661	4871286	5182484
064	ICSA		1608427	2647961	26907	744944	191862	21113	3418944	2034671	4251954	4317114
065	ICSAB		1579219	2651277	26614	749393	194477	21020	3426073	2049031	4244541	4370846
068	BLANK	QC445403	2042601	2888217	27070	862198	234234	23086	4197834	2769930	4819914	5210509
069	MSS	203769-009	1977640	2939523	28244	855380	232387	23824	4010680	2482413	4621508	4900312
070	SER	QC445408	1952753	2766020	27583	860139	231695	23799	3951145	2571991	4472391	4822829
071	MS	QC445406	1982219	2924996	27441	839978	223204	23208	4029251	2523815	4671901	4954614

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 898232551

Date : 06/09/08 Reference : f0910003
Sequence : MET16 f0910 Analyzed : 06/09/08 12:09

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
072	MSD	QC445407	1966643	2901875	27453	840510	226210	23025	3984488	2509757	4629521	4892875
073	PDS	QC445409	1928238	2895862	26951	843582	224228	22722	3890566	2413597	4590975	4874744
074	SAMPLE	203769-001	2044922	2919571	27708	857443	233924	24219	4199397	2710162	4731902	5098721
075	SAMPLE	203769-002	1977770	2790567	26484	837362	226256	22886	4023563	2594427	4512990	4870502
076	CCV		2028836	2981247	28276	865999	233052	23862	4088470	2636401	4780684	5047552
078	CCB		2038888	2845778	27483	859463	233393	23808	4092914	2712414	4621049	4936844
079	SAMPLE	203769-003	2010239	2786202	27159	856137	233759	23573	4010050	2608288	4491245	4865361
080	SAMPLE	203769-004	2077763	2929776	27791	860428	234244	24176	4200158	2725826	4734131	5083736
081	SAMPLE	203769-005	2057091	2904701	27313	828999	228919	23541	4147485	2695495	4678498	5018372
082	SAMPLE	203769-006	2072496	2922001	27795	856719	234343	23703	4164465	2729586	4705440	5117403
083	SAMPLE	203769-007	2072670	2889719	27762	840282	231988	23962	4119823	2679415	4622165	5033605
084	SAMPLE	203769-008	2051262	2961152	28360	849471	228308	23700	4026315	2494300	4633793	4879431
085	SAMPLE	203769-011	2102168	2924180	27770	864713	234234	23763	4174089	2709885	4664227	4971828
086	SAMPLE	203773-001	2106062	2934004	27971	857843	232718	23801	4182637	2685359	4705533	4983456
[illegible]	SAMPLE	203773-002	2101255	2917219	28267	858700	233622	24100	4127208	2666207	4686023	4916304
[illegible]	CCV		2059062	2968404	27840	856614	229921	23643	4049896	2572032	4704504	4934152
090	CCB		2060795	2926512	27077	826943	225674	23247	4089084	2660559	4647828	4870672
091	ICSA		1573024	2600767	25687	719465	184019	20086	3284306	1968014	4105277	4205619
092	ICSAB		1527985	2602807	24903	721070	185713	19623	3327164	1977525	4139655	4265338
095	BLANK	QC445591	1874043	2656634	24301	787106	227835	21894	3781562	2465819	4365077	4636746
096	BS	QC445592	1899767	2778900	25489	792103	214570	21255	3900002	2455813	4522597	4787118
097	BSD	QC445593	1866471	2762953	24707	792062	210631	20516	3881638	2466087	4500050	4842639
098	MSS	203763-006	1926741	2913750	26440	859208	225616	22372	3966085	2536889	4666358	4878112
[illegible]	MS	QC445594	1907865	2987394	26432	838554	219051	22153	3943933	2550482	4719992	4917601
[illegible]	MSD	QC445595	1888932	2944427	25992	838238	221052	21930	3923142	2521623	4662358	4862570
101	MSS	203763-006	1955680	2834224	25492	795644	216336	22141	3961292	2534744	4549621	4855407
102	SER	QC445598	1982162	2825728	25558	803749	219963	22582	4059782	2617174	4581376	4845342
103	CCV		1923678	2886431	25841	806300	216984	22175	3969632	2491030	4586412	4837517
105	CCB		1963057	2826456	26357	800549	221280	22528	4043401	2642544	4597763	4941659
108	MS	QC445596	1972454	2856132	25736	786531	214007	21995	3981098	2544517	4585420	4911037
109	MSD	QC445597	1939483	2816173	25046	784387	213681	21603	3878888	2482920	4477983	4735084
[illegible]	PDS	QC445599	1914893	2882127	25232	780417	211710	21616	3922031	2482245	4588998	4823579
[illegible]	SAMPLE	203763-005	1887066	2885303	25431	796042	215248	21835	3899546	2443854	4568454	4714641
112	SAMPLE	203763-007	1980187	2889760	25837	796018	218543	22512	4025803	2525612	4607010	4830282
113	SAMPLE	203763-008	1930524	2813887	24868	755325	206610	21440	3912946	2481683	4504810	4750757
114	SAMPLE	203764-001	1961978	2799390	25331	789404	217249	21896	3977109	2563404	4491954	4757339
115	SAMPLE	203787-001	1937743	2813111	25426	775399	212409	21798	3887641	2431147	4464193	4700609
116	SAMPLE	203787-002	1899454	2753087	24767	772069	211393	21440	3753067	2356523	4318732	4543701
117	MSS	203763-006	1952255	2806083	24858	771436	211400	21893	3961816	2526319	4483656	4803544
118	CCV		1902923	2821972	25045	776771	210187	21732	3883849	2445620	4510116	4721633
120	CCB		1946288	2813360	25217	785260	215111	21998	3932724	2537674	4487261	4723994
121	SAMPLE	203787-003	1920174	2831513	25543	779081	213424	22051	3881742	2413278	4463814	4671899
122	SAMPLE	203787-005	1911815	2823667	25295	768431	209100	21685	3776903	2317008	4401386	4579114
123	SAMPLE	203799-001	1993762	2844588	25400	778154	213904	22035	3976250	2494772	4536681	4768137
124	SAMPLE	203799-002	1947916	2801617	24914	776338	214557	21667	3926570	2484173	4458744	4651284
125	SAMPLE	203799-003	1971767	2833876	25085	780058	215193	21797	3934230	2469949	4500384	4726461
126	SAMPLE	203802-001	1801221	2831514	25402	746254	199112	21056	3602419	2135758	4315448	4335043
127	SAMPLE	203802-002	1694360	2766464	23095	737662	189274	17947	3173143	1750181	4245211	3762431
128	SAMPLE	203763-005	1858949	2836952	25118	746096	205417	21706	3739376	2283067	4404965	4472059
[illegible]	SAMPLE	203763-007	1905828	2858539	25404	757800	209642	22040	3860369	2401052	4484795	4612064
[illegible]	SAMPLE	203763-008	1888512	2807890	24878	722315	200159	21613	3825515	2380021	4389952	4545437
131	CCV		1852266	2840990	25273	753784	205765	21705	3842469	2366505	4510046	4626144

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 898232551

Date : 06/09/08
Sequence : MET16 f0910

Reference : f0910003
Analyzed : 06/09/08 12:09

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
132	CCB		1897622	2827428	25643	768087	213106	22660	3879700	2443035	4465041	4545339
134	ICSA		1500614	2519291	22932	652217	168693	18360	3120394	1862313	3977488	3935435
135	ICSAB		1432683	2441503	22197	648453	168073	17886	3089967	1817290	3881022	3901917
138	MSS	203763-006	1862718	2785542	24077	766090	211786	21478	3940631	2473629	4472280	4678968
139	MS	QC445594	1852577	2749307	23591	772394	211338	21214	3905038	2482152	4455659	4634747
140	MSD	QC445595	1839554	2754916	23369	755767	208212	20654	3875990	2465360	4448914	4656345
141	MSS	203763-006	1835082	2715310	23849	752375	208821	21106	3834004	2415926	4362394	4531256
142	SER	QC445598	1868887	2745543	24687	776614	216231	21883	3828288	2425231	4401924	4549569
143	MS	QC445596	1878245	2796497	24284	777892	214917	21309	3908704	2474657	4477000	4644016
144	MSD	QC445597	1843596	2752481	23999	761722	210953	21233	3840697	2419886	4378051	4578859
145	PDS	QC445599	1797537	2739909	24013	756647	206567	21056	3699407	2275512	4329623	4497538
146	CCV		1821384	2755679	24611	764366	206927	21307	3726262	2307707	4387312	4494869
148	CCB		1890164	2795809	25069	779465	213868	21791	3879440	2469907	4453570	4574314
149	BLANK	QC445591	1853867	2648767	23690	740987	217472	21492	3694126	2311405	4257563	448619[illegible]
150	SAMPLE	203802-001	1920894	2846424	25252	871704	241114	22089	3973748	2480623	4506803	465479[illegible]
151	SAMPLE	203802-002	1895930	2797331	25387	782111	214305	22032	3874378	2377893	4408561	4485928
152	SAMPLE	203802-001	1649736	2437816	25208	774167	212167	21862	3313975	2039733	3823685	3910037
153	SAMPLE	203802-002	1874252	2876003	25923	774347	208087	21969	3742001	2219702	4461215	4417054
154	CCV		1861923	2856034	25203	772484	208640	21664	3831245	2343738	4511777	4572403
156	CCB		1915549	2850868	25527	790637	217316	22177	3948937	2429558	4483074	4573751
157	ICSA		1484026	2526608	23676	670169	172449	18972	3135996	1836250	3966498	3929094
160	ICSAB		1382488	2407457	21888	647583	166477	17671	3048392	1782584	3788500	3827805

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET16
Calnum : 898232551001
Units : ug/L

Date : 09-JUN-2008 12:09
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	f0910004	898232551004		09-JUN-2008 12:21	S9391, S9405
L2	f0910005	898232551005		09-JUN-2008 12:34	S9392, S9405
L3	f0910006	898232551006		09-JUN-2008 12:46	S9399, S9405
L4	f0910007	898232551007		09-JUN-2008 12:58	S9400, S9405
L5	f0910008	898232551008		09-JUN-2008 13:10	S9389, S9405
L6	f0910009	898232551009		09-JUN-2008 13:22	S9390, S9405

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.4337	0.7755	0.3258	0.3058	0.3091	0.3090	BLNK	-1.2896	3.23592		0.4098	1.000	0.995	
Antimony	A	0.4815	0.3964	0.1674	0.1605	0.1678	0.1668	BLNK	-0.0103	5.98880		0.2567	1.000	0.995	
Barium	A	0.0802	0.1301	0.0552	0.0507	0.0513	0.0525	BLNK	-0.0204	19.1263		0.0700	1.000	0.995	
Beryllium	A	0.1493	0.2915	0.1368	0.1346	0.1360	0.1347	BLNK	-0.0041	7.41135		0.1638	1.000	0.995	
Cadmium	A	0.0481	0.1098	0.0464	0.0462	0.0465	0.0466	BLNK	-0.0042	21.4868		0.0573	1.000	0.995	
Calcium	A	0.0376	0.0408	0.0170	0.0135	0.0118	0.0118	BLNK	-17.096	84.8454		0.0221	1.000	0.995	
Lead	A	0.5483	0.8433	0.3518	0.3270	0.3281	0.3187	BLNK	-0.0506	3.12027		0.4529	1.000	0.995	
Magnesium	A	0.3179	0.6405	0.2694	0.2494	0.2523	0.2507	BLNK	-1.2113	3.98449		0.3300	1.000	0.995	
Molybdenum	A	0.1477	0.2798	0.1170	0.1135	0.1197	0.1178	BLNK	-0.0165	8.46160		0.1492	1.000	0.995	
Potassium	A	3.8252	2.4369	0.7260	0.4051	0.3769	0.3738	BLNK	-94.471	2.68604		1.3573	1.000	0.995	
Silver	A	1.1412	0.4876	0.2098	0.1993	0.2048	0.2007	BLNK	-0.0089	4.96166		0.4072	1.000	0.995	
Thallium	A	0.5643	1.0761	0.4596	0.4467	0.4739	0.4700	BLNK	-0.0121	2.12459		0.5818	1.000	0.995	
Arsenic	E	0.4191	0.7028	0.3704	0.3530	0.3405	0.3424	BLNK	-0.0208	2.92429		0.4214	1.000	0.995	
Chromium	E	7.0941	7.8765	3.3753	3.0928	2.9616	2.9176	BLNK	-0.0846	0.34186		4.5530	1.000	0.995	
Cobalt	E	5.8148	11.778	5.7488	5.6276	5.3253	5.2373	BLNK	-0.0082	0.19028		6.5886	1.000	0.995	
Copper	E	12.380	17.132	13.764	5.8732	5.3038	5.2163	BLNK	-0.0821	0.19111		9.9448	1.000	0.995	
Manganese	E	1.5445	2.2960	1.1924	1.0396	0.9913	0.9853	BLNK	-0.0169	1.01370		1.3415	1.000	0.995	
Nickel	E	2.8597	3.8607	1.7626	1.6538	1.5517	1.5146	BLNK	-0.0297	0.65701		2.2005	1.000	0.995	
Sodium	E	2.3879	1.5830	0.5548	0.3807	0.3422	0.3316	BLNK	-77.370	3.01031		0.9300	1.000	0.995	
Vanadium	E	3.0839	4.6025	2.1592	2.0684	2.0309	2.0378	BLNK	-0.0362	0.49115		2.6638	1.000	0.995	
Zinc	E	10.051	4.9230	2.7241	1.1610	0.6059	0.5908	BLNK	-1.1729	1.69290		3.3426	0.998	0.995	
Iron	H	0.7593	1.1204	0.5319	0.4901	0.4865	0.4777	BLNK	-1.5020	2.08560		0.6443	1.000	0.995	
Selenium	H	0.0805	0.1536	0.0714	0.0744	0.0707	0.0705	BLNK	-0.0110	14.1798		0.0868	1.000	0.995	

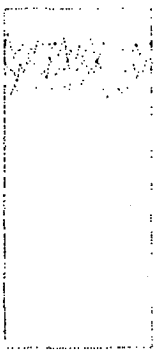
Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	27	25.00	146	100.0	4	1000	-1	10000	0	20000	0
Antimony	A	0.100	178	0.250	133	1.000	-1	10.00	-4	100.0	0	200.0	0
Barium	A	0.100	33	0.250	141	1.000	4	10.00	-3	100.0	-2	200.0	0
Beryllium	A	0.100	7	0.250	114	1.000	1	10.00	0	100.0	1	200.0	0
Cadmium	A	0.100	-1	0.250	134	1.000	-1	10.00	-1	100.0	0	200.0	0
Calcium	A	10.00	48	25.00	178	100.0	27	1000	13	10000	0	20000	0
Lead	A	0.100	21	0.250	143	1.000	5	10.00	2	100.0	2	200.0	-1
Magnesium	A	10.00	15	25.00	150	100.0	6	1000	-1	10000	1	20000	0
Molybdenum	A	0.100	8	0.250	130	1.000	-3	10.00	-4	100.0	1	200.0	0
Potassium	A	10.00	-17	25.00	177	100.0	1	1000	-1	10000	0	20000	0
Silver	A	0.100	457	0.250	138	1.000	3	10.00	-1	100.0	2	200.0	0
Thallium	A	0.050	-4	0.125	119	0.500	-5	5.000	-5	50.00	1	100.0	0
Arsenic	E	0.100	2	0.250	97	1.000	6	10.00	3	100.0	0	200.0	0
Chromium	E	0.100	58	0.250	135	1.000	7	10.00	5	100.0	1	200.0	0
Cobalt	E	0.100	2	0.250	121	1.000	9	10.00	7	100.0	1	200.0	0
Copper	E	0.100	54	0.250	195	1.000	155	10.00	11	100.0	1	200.0	0
Manganese	E	0.100	40	0.250	126	1.000	19	10.00	5	100.0	0	200.0	0
Nickel	E	0.100	58	0.250	142	1.000	13	10.00	8	100.0	2	200.0	-1
Sodium	E	10.00	-155	25.00	67	100.0	-10	1000	7	10000	2	20000	-1
Vanadium	E	0.100	15	0.250	112	1.000	2	10.00	1	100.0	0	200.0	0
Zinc	E	0.100	429	0.250	264	1.000	244	10.00	85	100.0	1	200.0	-1
Iron	H	10.00	43	25.00	128	100.0	9	1000	2	10000	1	20000	0
Selenium	H	0.100	3	0.250	113	1.000	0	10.00	5	100.0	0	200.0	0

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

898232551001

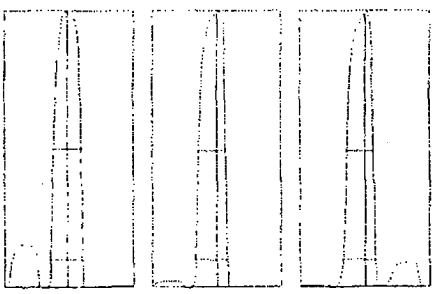
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	16219.0	16503.2	2.06	0.90
89	50,000	38062.0	38229.1	1.55	2.40
205	20,000	18136.0	17646.8	2.14	12.10

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.743%
Doubly Charged: 70/140 2.177%



m/z:	7	89	205
Height:	16,793	38,453	17,654
Axis:	7.00	89.05	205.05
W-50%:	0.70	0.65	0.65
W-10%:	0.7500	0.7500	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===		===Ion Lenses===		===Q-Pole Parameters==	
RF Power :	1600 W	Extract 1 :	0 V	AMU Gain :	1
RF Matching :	1.7 V	Extract 2 :	-75 V	AMU Offset :	1
Smpl Depth :	7 mm	Omega Bias-ce :	-22 V	Axis Gain :	0.99
Torch-H :	0.4 mm	Omega Lens-ce :	0.4 V	Axis Offset :	0.
Torch-V :	-1.2 mm	Cell Entrance :	-30 V	QP Bias :	
Carrier Gas :	1.05 L/min	QP Focus :	8 V		
Makeup Gas :	0 L/min	Cell Exit :	-30 V	===Detector Parameters	
Optional Gas :	--- %			Discriminator :	
Nebulizer Pump :	0.1 rps	===Octopole Parameters===		Analog HV :	22
Sample Pump :	--- rps	OctP RF :	119 V	Pulse HV :	19
S/C Temp :	2 degC	OctP Bias :	-6 V		

===Reaction Cell===
Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : -

Tune File : he.u
He Gas: 6 mL/min
Optional Gas: --- %
QP Focus: -10 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -15 V

m/z	Count(Mean)	RSD%
51	8.1	36.96
59	2537.4	2.76
89	1375.3	2.81

Integration Time: 0.1

Tune File : h2.u
H2 Gas: 4 mL/min
Optional Gas: --- %
QP Focus: -15 V
Cell Exit: -38 V

m/z	Count(Mean)	RSD%
59	2363.5	2.49
78	0.3	172.21
89	22343.3	1.80

Integration Time: 0.1

P/A Factor Tuning Report

Acquired:Jun 9 2008 11:10 am

Mass[amu]	Element	P/A Factor
6	Li	0.066016
7	(Li)	0.068159
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.085592
45	Sc	0.085641
51	V	0.086508
52	Cr	0.088431
55	Mn	0.089455
56	Fe	Sensitivity too high
59	Co	0.090514
60	Ni	Sensitivity too low
63	Cu	0.093278
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	0.092714
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	Sensitivity too high
98	Mo	0.092341
99	(Ru)	Sensitivity too low
107	Ag	0.094894
111	Cd	Sensitivity too low
115	In	Sensitivity too high
118	(In)	0.094063
121	Sb	0.094340
137	Ba	Sensitivity too low
159	Tb	Sensitivity too high
205	Tl	0.096275
206	(Pb)	Sensitivity too low
207	(Pb)	Sensitivity too low
208	Pb	0.096955
209	Bi	0.097157

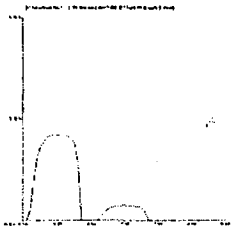
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 2240 V
Pulse HV: 1910 V

MET16 QC Tune Report

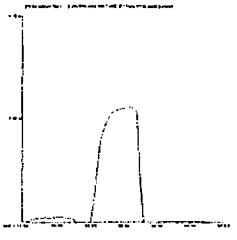
Data File: c:\ICPCHEM\1\DATA\08F09101.B\001TUNE.D
Date Acquired: Jun 9 2008 11:51 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s9387
Misc Info:
Vial Number: 1307
Current Method: c:\ICPCHEM\1\DATA\08F09101.B\TN6020.M

RSD (%)

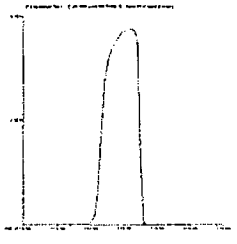
Element	Actual	Required	Flag
7 Li	0.38	5.00	
59 Co	0.53	5.00	
115 In	1.17	5.00	
205 Tl	1.14	5.00	



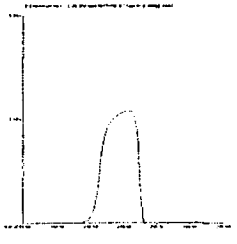
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.05
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.05
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

MET16 Sample QC Report

Data File: c:\ICPCHEM\1\DATA\08F09101.B\003CALB.D\003CALB.D#
Date Acquired: Jun 9 2008 12:09 pm
Acq. Method: lcj6020.M
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101 ,
Current Method: c:\ICPCHEM\1\DATA\08F09101.B\lcj6020.M
Calibration File: C:\ICPCHEM\1\DATA\08F09101.B\lcj6020.C
Last Cal. Update: Jun 09 2008 01:31 pm
Sample Type: CalBlk
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Data Results:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Raw Conc	CPS Mean	Raw CPS Mean	Units	RSD(%)	Flag
9 Be	6	3	0.0000	5.580463E-04	24.45	ppb	1316900000.00	
23 Na	45	2	0.0000	2.570175E+01	15389.01	ppb	211550000.00	
24 Mg	45	3	0.0000	3.040015E-01	18090.44	ppb	743750000.00	
27 Al	45	3	0.0000	3.985219E-01	23716.04	ppb	583830000.00	
39 K	45	3	0.0000	3.517128E+01	2093150.00	ppb	7516700.00	
44 Ca	45	3	0.0000	2.014918E-01	11991.64	ppb	246300000.00	
51 V	45	2	0.0000	7.360827E-02	44.07	ppb	333130000.00	
52 Cr	45	2	0.0000	2.474256E-01	148.15	ppb	340120000.00	
55 Mn	45	2	0.0000	1.670261E-02	10.00	ppb	804350000.00	
56 Fe	45	1	0.0000	7.201823E-01	13169.39	ppb	144340000.00	
59 Co	45	2	0.0000	4.329749E-02	25.93	ppb	696910000.00	
60 Ni	45	2	0.0000	4.516005E-02	27.04	ppb	707020000.00	
63 Cu	72	2	0.0000	4.296299E-01	214.45	ppb	142420000.00	
66 Zn	72	2	0.0000	6.928239E-01	345.93	ppb	509090000.00	
75 As	72	2	0.0000	7.125343E-03	3.56	ppb	1406200000.00	
78 Se	72	1	0.0000	7.745371E-04	3.78	ppb	15433000000.00	
98 Mo	89	3	0.0000	1.950623E-03	186.68	ppb	274030000.00	
107 Ag	115	3	0.0000	1.788912E-03	152.23	ppb	388430000.00	
111 Cd	115	3	0.0000	1.956270E-04	16.67	ppb	542010000.00	
121 Sb	115	3	0.0000	1.712055E-03	145.56	ppb	1601900000.00	
137 Ba	159	3	0.0000	1.069197E-03	108.89	ppb	4131800000.00	
205 Tl	209	3	0.0000	5.699696E-03	315.57	ppb	1331200000.00	
208 Pb	159	3	0.0000	1.620868E-02	1652.36	ppb	95639000.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	2192151	0.87	2192151	100.0	80 - 120	
45 Sc	1	914259	0.22	914259	100.0	80 - 120	
45 Sc	2	29938	0.05	29938	100.0	80 - 120	
45 Sc	3	2975662	0.22	2975662	100.0	80 - 120	
72 Ge	1	243670	0.21	243670	100.0	80 - 120	
72 Ge	2	24961	0.44	24961	100.0	80 - 120	
89 Y	3	4781284	1.15	4781284	100.0	80 - 120	
115 In	3	4254937	0.55	4254937	100.0	80 - 120	
159 Tb	3	5096586	1.37	5096586	100.0	80 - 120	
209 Bi	3	2768004	0.18	2768004	100.0	80 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
Tune File# 2 c:\icpchem\1\7500\he.u
Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : ---

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

MET16 Sample QC Report

Data File: c:\ICPCHEM\1\DATA\08F09101.B\004CALS.D\004CALS.D#
Date Acquired: Jun 9 2008 12:21 pm
Acq. Method: lcj6020.M
Operator:
Sample Name: S9391
Misc Info:
Vial Number: 1102
Current Method: c:\ICPCHEM\1\DATA\08F09101.B\lcj6020.M
Calibration File: C:\ICPCHEM\1\DATA\08F09101.B\lcj6020.C
Last Cal. Update: Jun 09 2008 01:31 pm
Sample Type: CalStd
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Data Results:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Raw Conc	CPS Mean	Raw CPS Mean	Units	RSD(%)	Flag
9 Be	6	3	0.1065	1.492905E-02	665.59	ppb	1.76	
23 Na	45	2	-5.4860'	2.387922E+01	14253.49	ppb	17.52	
24 Mg	45	3	11.4600	3.179059E+00	193376.20	ppb	1.01	
27 Al	45	3	12.7500	4.337225E+00	263832.50	ppb	0.62	
39 K	45	3	8.2750	3.825211E+01	2326851.00	ppb	4.93	
44 Ca	45	3	14.8200	3.761103E-01	22877.26	ppb	3.86	
51 V	45	2	0.1153	3.083924E-01	184.08	ppb	4.37	
Cr	45	2	0.1579	7.094089E-01	423.34	ppb	3.19	
Mn	45	2	0.1396	1.544493E-01	92.22	ppb	14.56	
Fe	45	1	14.3300	7.593127E+00	139880.50	ppb	1.71	
59 Co	45	2	0.1024	5.814810E-01	347.04	ppb	4.54	
60 Ni	45	2	0.1582	2.859655E-01	170.74	ppb	16.49	
63 Cu	72	2	0.1545	1.237989E+00	616.32	ppb	9.22	
66 Zn	72	2	0.5286	1.005064E+00	500.38	ppb	19.30	
75 As	72	2	0.1017	4.191357E-02	20.89	ppb	22.36	
78 Se	72	1	0.1031	8.048183E-03	39.56	ppb	8.19	
98 Mo	89	3	0.1085	1.477085E-02	1439.01	ppb	4.81	
107 Ag	115	3	0.5573	1.141201E-01	9840.24	ppb	1.00	
111 Cd	115	3	0.0991	4.807048E-03	414.47	ppb	2.51	
121 Sb	115	3	0.2781	4.815266E-02	4152.93	ppb	4.53	
7 Ba	159	3	0.1330	8.023952E-03	832.27	ppb	9.05	
5 Tl	209	3	0.0478	2.821552E-02	1607.93	ppb	3.24	
208 Pb	159	3	0.1205	5.483001E-02	5685.16	ppb	6.22	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	2228899	1.16	2192151	101.7	80 - 120	
45 Sc	1	921147	0.74	914259	100.8	80 - 120	
45 Sc	2	29842	1.15	29938	99.7	80 - 120	
45 Sc	3	3041515	0.65	2975662	102.2	80 - 120	
Ge	1	245719	0.34	243670	100.8	80 - 120	
Ge	2	24897	0.72	24961	99.7	80 - 120	
Y	3	4869149	1.44	4781284	101.8	80 - 120	
115 In	3	4311536	0.78	4254937	101.3	80 - 120	
159 Tb	3	5185134	0.53	5096586	101.7	80 - 120	
209 Bi	3	2849274	1.16	2768004	102.9	80 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
Tune File# 2 c:\icpchem\1\7500\he.u
Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : c:\ICPCHEM\1\DATA\08F09101.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

MET16 Sample QC Report

Data File: c:\ICPCHEM\1\DATA\08F09101.B\005CALS.D\005CALS.D#
Date Acquired: Jun 9 2008 12:34 pm
Acq. Method: lcj6020.M
Operator:
Sample Name: s9392
Misc Info:
Vial Number: 1103
Current Method: c:\ICPCHEM\1\DATA\08F09101.B\lcj6020.M
Calibration File: C:\ICPCHEM\1\DATA\08F09101.B\lcj6020.C
Last Cal. Update: Jun 09 2008 01:31 pm
Sample Type: CalStd
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Data Results:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Raw Conc	CPS Mean	Raw CPS Mean	Units	RSD(%)	Flag
9 Be	6	3	0.5360	7.288172E-02	2949.25	ppb	7.90	
23 Na	45	2	41.7600	3.957502E+01	23416.78	ppb	3.04	
24 Mg	45	3	62.5900	1.601296E+01	854940.00	ppb	17.83	
27 Al	45	3	61.4500	1.938784E+01	1036274.00	ppb	16.71	
39 K	45	3	69.1700	6.092238E+01	3256781.00	ppb	38.36	
44 Ca	45	3	69.4500	1.020053E+00	54551.42	ppb	19.71	
51 V	45	2	0.5290	1.150620E+00	680.76	ppb	6.21	
52 Cr	45	2	0.5886	1.969121E+00	1165.24	ppb	6.58	
55 Mn	45	2	0.5649	5.739931E-01	339.64	ppb	1.39	
56 Fe	45	1	56.9100	2.801007E+01	530928.38	ppb	1.23	
59 Co	45	2	0.5520	2.944497E+00	1742.34	ppb	3.43	
60 Ni	45	2	0.6045	9.651747E-01	571.13	ppb	4.24	
63 Cu	72	2	0.7364	4.283034E+00	2154.99	ppb	3.58	
66 Zn	72	2	0.9106	1.230738E+00	619.28	ppb	8.88	
75 As	72	2	0.4930	1.757025E-01	88.45	ppb	16.47	
78 Se	72	1	0.5336	3.840661E-02	193.34	ppb	10.22	
98 Mo	89	3	0.5753	6.993812E-02	5958.04	ppb	18.25	
107 Ag	115	3	0.5959	1.218919E-01	9297.63	ppb	14.55	
111 Cd	115	3	0.5855	2.744478E-02	2094.66	ppb	14.22	
121 Sb	115	3	0.5832	9.909405E-02	7568.83	ppb	12.83	
137 Ba	159	3	0.6015	3.251953E-02	2937.06	ppb	19.27	
205 Tl	209	3	0.2737	1.345070E-01	6716.27	ppb	11.74	
208 Pb	159	3	0.6073	2.108269E-01	19105.95	ppb	16.40	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	2029348	6.30	2192151	92.6	80 - 120	
45 Sc	1	947843	1.30	914259	103.7	80 - 120	
45 Sc	2	29585	0.26	29938	98.8	80 - 120	
45 Sc	3	2716862	14.97	2975662	91.3	80 - 120	
72 Ge	1	251823	0.85	243670	103.3	80 - 120	
72 Ge	2	25155	0.74	24961	100.8	80 - 120	
89 Y	3	4335121	14.76	4781284	90.7	80 - 120	
115 In	3	3862350	13.36	4254937	90.8	80 - 120	
159 Tb	3	4596927	14.21	5096586	90.2	80 - 120	
209 Bi	3	2516699	11.36	2768004	90.9	80 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
Tune File# 2 c:\icpchem\1\7500\he.u
Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : c:\ICPCHEM\1\DATA\08F09101.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

MET16 Sample QC Report

Data File: c:\ICPCHEM\1\DATA\08F09101.B\006CALS.D\006CALS.D#
Date Acquired: Jun 9 2008 12:46 pm
Acq. Method: lcj6020.M
Operator:
Sample Name: S9399
Misc Info:
Vial Number: 1104
Current Method: c:\ICPCHEM\1\DATA\08F09101.B\lcj6020.M
Calibration File: C:\ICPCHEM\1\DATA\08F09101.B\lcj6020.C
Last Cal. Update: Jun 09 2008 01:31 pm
Sample Type: CalStd
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Data Results:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Raw Conc	CPS Mean	Raw CPS Mean	Units	RSD(%)	Flag
9 Be	6	3	1.0100	1.368088E-01	6124.69	ppb	1.61	
23 Na	45	2	89.6500	5.548335E+01	32927.12	ppb	1.96	
24 Mg	45	3	106.1000	2.693585E+01	1634883.00	ppb	0.82	
27 Al	45	3	104.1000	3.258045E+01	1977457.00	ppb	0.40	
39 K	45	3	100.5000	7.259700E+01	4406157.00	ppb	0.85	
44 Ca	45	1	127.0000	1.698506E+00	103087.80	ppb	0.53	
51 V	45	2	1.0240	2.159249E+00	1281.18	ppb	2.42	
[illegible] Cr	45	2	1.0690	3.375341E+00	2002.37	ppb	4.72	
[illegible] Mn	45	2	1.1920	1.192446E+00	707.80	ppb	3.76	
[illegible] Fe	45	1	109.4000	5.318980E+01	1007689.00	ppb	0.95	
59 Co	45	2	1.0860	5.748846E+00	3411.52	ppb	1.14	
60 Ni	45	2	1.1280	1.762583E+00	1045.60	ppb	4.93	
63 Cu	72	2	2.5480	1.376367E+01	6861.59	ppb	0.56	
66 Zn	72	2	3.4390	2.724104E+00	1357.85	ppb	6.43	
75 As	72	2	1.0620	3.704427E-01	184.67	ppb	3.65	
78 Se	72	1	1.0020	7.143040E-02	357.78	ppb	8.00	
98 Mo	89	3	0.9735	1.169978E-01	11394.67	ppb	0.89	
107 Ag	115	3	1.0320	2.098409E-01	17926.79	ppb	1.32	
111 Cd	115	3	0.9938	4.644583E-02	3967.32	ppb	2.56	
121 Sb	115	3	0.9921	1.673682E-01	14300.65	ppb	0.76	
[illegible]7 Ba	159	3	1.0360	5.522940E-02	5697.95	ppb	2.55	
[illegible]5 Tl	209	3	0.4761	2.297803E-01	12901.90	ppb	3.74	
208 Pb	159	3	1.0470	3.517570E-01	36296.67	ppb	0.45	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	2238243	1.40	2192151	102.1	80 - 120	
45 Sc	1	947365	1.85	914259	103.6	80 - 120	
45 Sc	2	29673	1.26	29938	99.1	80 - 120	
45 Sc	3	3034700	0.59	2975662	102.0	80 - 120	
[illegible] Ge	1	250535	0.80	243670	102.8	80 - 120	
[illegible]e	2	24926	0.41	24961	99.9	80 - 120	
[illegible]	3	4869628	0.19	4781284	101.8	80 - 120	
115 In	3	4272162	1.74	4254937	100.4	80 - 120	
159 Tb	3	5159296	1.00	5096586	101.2	80 - 120	
209 Bi	3	2808052	0.90	2768004	101.4	80 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
Tune File# 2 c:\icpchem\1\7500\he.u
Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : c:\ICPCHEM\1\DATA\08F09101.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

MET16 Sample QC Report

Data File: c:\ICPCHEM\1\DATA\08F09101.B\007CALS.D\007CALS.D#
Date Acquired: Jun 9 2008 12:58 pm
Acq. Method: lcj6020.M
Operator:
Sample Name: S9400
Misc Info:
Vial Number: 1105
Current Method: c:\ICPCHEM\1\DATA\08F09101.B\lcj6020.M
Calibration File: C:\ICPCHEM\1\DATA\08F09101.B\lcj6020.C
Last Cal. Update: Jun 09 2008 01:31 pm
Sample Type: CalStd
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Data Results:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Raw Conc	CPS Mean	Raw CPS Mean	Units	RSD(%)	Flag
9 Be	6	3	9.9730	1.346219E+00	60468.84	ppb	2.48	
23 Na	45	2	1069.0000	3.807221E+02	222458.70	ppb	2.49	
24 Mg	45	3	992.5000	2.494065E+02	15473990.00	ppb	0.59	
27 Al	45	3	988.3000	3.058001E+02	18972190.00	ppb	0.46	
39 K	45	3	993.6000	4.050892E+02	25132480.00	ppb	0.17	
44 Ca	45	3	1132.0000	1.354220E+01	840187.69	ppb	1.09	
51 V	45	2	10.1200	2.068368E+01	12085.14	ppb	2.87	
52 Cr	45	2	10.4900	3.092832E+01	18072.39	ppb	1.13	
55 Mn	45	2	10.5200	1.039645E+01	6074.94	ppb	0.62	
56 Fe	45	1	1021.0000	4.901060E+02	9117661.00	ppb	0.60	
59 Co	45	2	10.7000	5.627558E+01	32882.18	ppb	1.77	
60 Ni	45	2	10.8300	1.653762E+01	9662.72	ppb	1.69	
63 Cu	72	2	11.1400	5.873180E+01	28858.02	ppb	0.63	
66 Zn	72	2	18.4800	1.161038E+01	5704.81	ppb	1.19	
75 As	72	2	10.3000	3.529772E+00	1734.33	ppb	2.92	
78 Se	72	1	10.5300	7.435939E-01	3689.58	ppb	1.61	
98 Mo	89	3	9.5860	1.134824E+00	111074.70	ppb	2.03	
107 Ag	115	3	9.8780	1.992694E+00	171740.59	ppb	0.37	
111 Cd	115	3	9.9190	4.618133E-01	39801.61	ppb	0.84	
121 Sb	115	3	9.5990	1.604558E+00	138282.09	ppb	0.62	
137 Ba	159	3	9.6770	5.070116E-01	52260.75	ppb	0.23	
205 Tl	209	3	4.7330	2.233547E+00	123680.90	ppb	2.13	
208 Pb	159	3	10.1500	3.270462E+00	337073.69	ppb	2.12	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	2246256	1.04	2192151	102.5	80 - 120	
45 Sc	1	930214	1.13	914259	101.7	80 - 120	
45 Sc	2	29217	0.89	29938	97.6	80 - 120	
45 Sc	3	3102110	0.57	2975662	104.2	80 - 120	
72 Ge	1	248125	1.47	243670	101.8	80 - 120	
72 Ge	2	24567	0.20	24961	98.4	80 - 120	
89 Y	3	4894393	0.90	4781284	102.4	80 - 120	
115 In	3	4309150	1.00	4254937	101.3	80 - 120	
159 Tb	3	5153799	0.79	5096586	101.1	80 - 120	
209 Bi	3	2769153	1.32	2768004	100.0	80 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
Tune File# 2 c:\icpchem\1\7500\he.u
Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : c:\ICPCHEM\1\DATA\08F09101.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

MET16 Sample QC Report

Data File: c:\ICPCHEM\1\DATA\08F09101.B\008CALS.D\008CALS.D#
Date Acquired: Jun 9 2008 01:10 pm
Acq. Method: lcj6020.M
Operator:
Sample Name: s9389
Misc Info:
Vial Number: 1106
Current Method: c:\ICPCHEM\1\DATA\08F09101.B\lcj6020.M
Calibration File: C:\ICPCHEM\1\DATA\08F09101.B\lcj6020.C
Last Cal. Update: Jun 09 2008 01:31 pm
Sample Type: CalStd
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Data Results:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Raw Conc	CPS Mean	Raw CPS Mean	Units	RSD(%)	Flag
9 Be	6	3	100.8000	1.359670E+01	603325.69	ppb	1.47	
23 Na	45	2	10220.0000	3.421704E+03	2061185.00	ppb	1.01	
24 Mg	45	3	10050.0000	2.523200E+03	157772700.00	ppb	1.84	
27 Al	45	3	10000.0000	3.091094E+03	193292000.00	ppb	0.28	
39 K	45	3	10030.0000	3.769182E+03	235695300.00	ppb	0.24	
44 Ca	45	3	10030.0000	1.183807E+02	7402442.00	ppb	1.00	
51 V	45	2	99.7100	2.030937E+02	122341.00	ppb	0.83	
Cr	45	2	101.2000	2.961587E+02	178401.00	ppb	1.20	
Mn	45	2	100.5000	9.912570E+01	59712.34	ppb	0.77	
56 Fe	45	1	10150.0000	4.865353E+03	89265840.00	ppb	1.28	
59 Co	45	2	101.3000	5.325279E+02	320789.41	ppb	0.52	
60 Ni	45	2	101.9000	1.551694E+02	93471.84	ppb	0.96	
63 Cu	72	2	101.3000	5.303803E+02	266072.00	ppb	0.61	
66 Zn	72	2	101.4000	6.059133E+01	30396.55	ppb	0.45	
75 As	72	2	99.5500	3.404936E+01	17081.28	ppb	1.63	
78 Se	72	1	100.2000	7.065196E+00	34631.66	ppb	0.26	
98 Mo	89	3	101.3000	1.197373E+01	1156170.00	ppb	0.41	
107 Ag	115	3	101.6000	2.048453E+01	1706091.00	ppb	1.45	
111 Cd	115	3	99.8900	4.649330E+00	387240.91	ppb	0.64	
121 Sb	115	3	100.5000	1.677903E+01	1397495.00	ppb	0.86	
137 Ba	159	3	98.1400	5.132030E+00	512626.09	ppb	0.39	
205 Tl	209	3	50.3200	2.369289E+01	1235511.00	ppb	1.53	
208 Pb	159	3	102.3000	3.281325E+01	3277574.00	ppb	0.29	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	2218754	0.50	2192151	101.2	80 - 120	
45 Sc	1	917383	1.23	914259	100.3	80 - 120	
45 Sc	2	30120	0.23	29938	100.6	80 - 120	
45 Sc	3	3126624	0.49	2975662	105.1	80 - 120	
Ge	1	245087	0.54	243670	100.6	80 - 120	
Ge	2	25083	0.34	24961	100.5	80 - 120	
Y	3	4827859	0.75	4781284	101.0	80 - 120	
115 In	3	4164524	0.50	4254937	97.9	80 - 120	
159 Tb	3	4994331	0.76	5096586	98.0	80 - 120	
209 Bi	3	2607298	0.78	2768004	94.2	80 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
Tune File# 2 c:\icpchem\1\7500\he.u
Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : c:\ICPCHEM\1\DATA\08F09101.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

MET16 Sample QC Report

Data File: c:\ICPCHEM\1\DATA\08F09101.B\009CALS.D\009CALS.D#
Date Acquired: Jun 9 2008 01:22 pm
Acq. Method: lcj6020.M
Operator:
Sample Name: S9390
Misc Info:
Vial Number: 1107
Current Method: c:\ICPCHEM\1\DATA\08F09101.B\lcj6020.M
Calibration File: C:\ICPCHEM\1\DATA\08F09101.B\lcj6020.C
Last Cal. Update: Jun 09 2008 01:31 pm
Sample Type: CalStd
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Data Results:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Raw Conc	CPS Mean	Raw CPS Mean	Units	RSD(%)	Flag
9 Be	6	3	199.6000	2.693465E+01	1171488.00	ppb	1.26	
23 Na	45	2	19880.0000	6.631361E+03	4063650.00	ppb	2.36	
24 Mg	45	3	19970.0000	5.013266E+03	313801700.00	ppb	0.65	
27 Al	45	3	20000.0000	6.180981E+03	386887620.00	ppb	0.38	
39 K	45	3	19980.0000	7.475648E+03	467928290.00	ppb	1.03	
44 Ca	45	3	19980.0000	2.356856E+02	14752600.00	ppb	0.54	
51 V	45	2	200.1000	4.075552E+02	249757.80	ppb	1.35	
52 Cr	45	2	199.4000	5.835188E+02	357582.69	ppb	0.76	
55 Mn	45	2	199.7000	1.970566E+02	120758.20	ppb	0.87	
56 Fe	45	1	19930.0000	9.554844E+03	175808000.00	ppb	2.26	
59 Co	45	2	199.3000	1.047459E+03	641836.63	ppb	1.59	
60 Ni	45	2	199.0000	3.029297E+02	185630.91	ppb	0.91	
63 Cu	72	2	199.3000	1.043252E+03	525019.88	ppb	0.75	
66 Zn	72	2	198.9000	1.181611E+02	59465.90	ppb	1.51	
75 As	72	2	200.2000	6.847140E+01	34459.11	ppb	0.59	
78 Se	72	1	199.9000	1.409736E+01	68053.72	ppb	0.93	
98 Mo	89	3	199.4000	2.356371E+01	2288460.00	ppb	0.25	
107 Ag	115	3	199.2000	4.014788E+01	3278822.00	ppb	1.14	
111 Cd	115	3	200.1000	9.310850E+00	760450.31	ppb	0.54	
121 Sb	115	3	199.8000	3.336088E+01	2724603.00	ppb	0.92	
137 Ba	159	3	200.9000	1.050743E+01	1055795.00	ppb	0.71	
205 Tl	209	3	99.8500	4.700315E+01	2384111.00	ppb	1.06	
208 Pb	159	3	198.8000	6.373624E+01	6403974.00	ppb	1.09	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	2174822	1.24	2192151	99.2	80 - 120	
45 Sc	1	920165	1.25	914259	100.6	80 - 120	
45 Sc	2	30642	1.77	29938	102.4	80 - 120	
45 Sc	3	3129622	0.92	2975662	105.2	80 - 120	
72 Ge	1	241368	0.17	243670	99.1	80 - 120	
72 Ge	2	25163	1.04	24961	100.8	80 - 120	
89 Y	3	4855926	1.23	4781284	101.6	80 - 120	
115 In	3	4083885	1.57	4254937	96.0	80 - 120	
159 Tb	3	5024356	1.50	5096586	98.6	80 - 120	
209 Bi	3	2536341	1.37	2768004	91.6	80 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
Tune File# 2 c:\icpchem\1\7500\he.u
Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : c:\ICPCHEM\1\DATA\08F09101.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551010 File : f0910010 Time : 09-JUN-2008 13:33
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9401, S9405

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.4098	0.3143	10000	10170	ug/L	2	10	
Antimony	A	0.2567	0.1723	100.0	103.2	ug/L	3	10	
Barium	A	0.0700	0.0518	100.0	99.13	ug/L	-1	10	
Beryllium	A	0.1638	0.1387	100.0	102.8	ug/L	3	10	
Cadmium	A	0.0573	0.0468	100.0	100.6	ug/L	1	10	
Calcium	A	0.0221	0.0121	10000	10270	ug/L	3	10	
Lead	A	0.4529	0.3260	100.0	101.7	ug/L	2	10	
Magnesium	A	0.3300	0.2561	10000	10200	ug/L	2	10	
Molybdenum	A	0.1492	0.1203	100.0	101.8	ug/L	2	10	
Potassium	A	1.3573	0.3815	10000	10150	ug/L	2	10	
Silver	A	0.4072	0.2149	100.0	106.6	ug/L	7	10	
Thallium	A	0.5818	0.4568	50.00	48.51	ug/L	-3	10	
Arsenic	E	0.4214	0.3505	100.0	102.5	ug/L	3	10	
Chromium	E	4.5530	2.9656	100.0	101.3	ug/L	1	10	
Cobalt	E	6.5886	5.4297	100.0	103.3	ug/L	3	10	
Copper	E	9.9448	5.4082	100.0	103.3	ug/L	3	10	
Manganese	E	1.3415	1.0093	100.0	102.3	ug/L	2	10	
Nickel	E	2.2005	1.5650	100.0	102.8	ug/L	3	10	
Sodium	E	0.9300	0.3483	10000	10410	ug/L	4	10	
Vanadium	E	2.6638	2.0834	100.0	102.3	ug/L	2	10	
Zinc	E	3.3426	0.6013	100.0	100.6	ug/L	1	10	
Iron	H	0.6443	0.4872	10000	10160	ug/L	2	10	
Selenium	H	0.0868	0.0734	100.0	104.0	ug/L	4	10	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	2283978	4.19
Scandium	A	2975662	3194307	7.35
Scandium	E	29938	31453	5.06
Yttrium	H	914259	950014	3.91
Germanium	H	243670	252343	3.56
Germanium	E	24961	25970	4.04
Indium	A	4254937	4232576	-0.53
Bismuth	A	2768004	2686079	-2.96
Yttrium	A	4781284	4962540	3.79
Terbium	A	5096586	5120213	0.46

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551011 File : f0910011 Time : 09-JUN-2008 13:51
Cal : 898232551001 Caldate : 09-JUN-2008

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	1.482	ug/L	
Antimony	A	ND	0.1000	0.02880	ug/L	
Barium	A	ND	0.1000	0.02829	ug/L	
Beryllium	A	ND	0.1000	0.02131	ug/L	
Cadmium	A	ND	0.1000	0.01640	ug/L	
Calcium	A	ND	10.00	3.488	ug/L	
Lead	A	ND	0.1000	0.02921	ug/L	
Magnesium	A	ND	10.00	4.248	ug/L	
Molybdenum	A	ND	0.1000	0.07024	ug/L	
Potassium	A	ND	10.00	6.671	ug/L	
Silver	A	ND	0.1000	0.01096	ug/L	
Thallium	A	ND	0.05000	0.007767	ug/L	
Arsenic	E	ND	0.1000	0.04450	ug/L	
Chromium	E	ND	0.1000	0.04322	ug/L	
Cobalt	E	ND	0.1000	0.01314	ug/L	
Copper	E	ND	0.1000	0.07210	ug/L	
Manganese	E	ND	0.1000	0.03907	ug/L	
Nickel	E	ND	0.1000	0.06568	ug/L	
Sodium	E	ND	10.00	8.044	ug/L	
Vanadium	E	ND	0.1000	0.02786	ug/L	
Zinc	E	0.3120	0.1000	0.6420	ug/L	ib ***
Iron	H	ND	10.00	4.521	ug/L	
Selenium	H	ND	0.1000	0.02970	ug/L	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	2253148	2.78
Scandium	A	2975662	3104738	4.34
Scandium	E	29938	31402	4.89
Scandium	H	914259	938653	2.67
Germanium	H	243670	254923	4.62
Germanium	E	24961	26421	5.85
Indium	A	4254937	4296944	0.99
Bismuth	A	2768004	2761198	-0.25
Yttrium	A	4781284	4925638	3.02
Terbium	A	5096586	5173232	1.50

ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551013 File : f0910013 Time : 09-JUN-2008 14:14
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9403, S9405

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.1963	0.1000	ug/L	!a+
Barium	A	4.812	0.1000	ug/L	!a+
Beryllium	A	[0.02490]	0.1000	ug/L	!a+
Cadmium	A	1.511	0.1000	ug/L	!a+
Lead	A	0.6914	0.1000	ug/L	!a+
Silver	A	0.4647	0.1000	ug/L	!a+
Thallium	A	0.05210	0.05000	ug/L	!a+
Arsenic	E	0.3155	0.1000	ug/L	!a+
Chromium	E	2.318	0.1000	ug/L	!a+
Cobalt	E	0.2444	0.1000	ug/L	!a+
Copper	E	2.495	0.1000	ug/L	!a+
Manganese	E	0.8566	0.1000	ug/L	!a+
Nickel	E	1.620	0.1000	ug/L	!a+
Vanadium	E	0.1095	0.1000	ug/L	!a+
Zinc	E	8.009	0.1000	ug/L	!a+
Selenium	H	[0.09360]	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93960	ug/L	94
Calcium	A	300000	303400	ug/L	101
Magnesium	A	100000	89810	ug/L	90
Molybdenum	A	2000	1976	ug/L	99
Potassium	A	100000	98160	ug/L	98
Sodium	E	250000	253100	ug/L	101
Iron	H	250000	250800	ug/L	100

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	1646446	-24.89
Scandium	A	2975662	2806715	-5.68
Indium	E	29938	29647	-0.97
Yttrium	H	914259	804186	-12.04
Germanium	H	243670	206299	-15.34
Germanium	E	24961	22720	-8.98
Indium	A	4254937	3519362	-17.29
Bismuth	A	2768004	2045381	-26.11
Yttrium	A	4781284	4454531	-6.83
Terbium	A	5096586	4442475	-12.83

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551014 File : f0910014 Time : 09-JUN-2008 14:26
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9404, S9405

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	90790	ug/L	-9		
Cadmium	A	100.0	93.35	ug/L	-7	20	
Calcium	A	300000	291800	ug/L	-3		
Magnesium	A	100000	86590	ug/L	-13		
Molybdenum	A	2000	1896	ug/L	-5		
Potassium	A	100000	95110	ug/L	-5		
Silver	A	50.00	47.22	ug/L	-6	20	
Arsenic	E	100.0	99.15	ug/L	-1	20	
Chromium	E	200.0	188.4	ug/L	-6	20	
Cobalt	E	200.0	178.8	ug/L	-11	20	
Copper	E	200.0	173.8	ug/L	-13	20	
Manganese	E	200.0	184.8	ug/L	-8	20	
Nickel	E	200.0	170.4	ug/L	-15	20	
Sodium	E	250000	243400	ug/L	-3		
Vanadium	E	200.0	193.3	ug/L	-3	20	
Zinc	E	100.0	86.26	ug/L	-14	20	
Iron	H	250000	245100	ug/L	-2		
Selenium	H	100.0	96.62	ug/L	-3	20	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	914259	781336	-14.54
Scandium	A	2975662	2679346	-9.96
Scandium	E	29938	28289	-5.51
Germanium	H	243670	201706	-17.22
Germanium	E	24961	22098	-11.47
Indium	A	4254937	3456514	-18.76
Yttrium	A	4781284	4306651	-9.93

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551023 File : f0910023 Time : 09-JUN-2008 16:17
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9402, S9405

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4098	0.3085	10000	9982	ug/L	0	10	
Antimony	A	0.2567	0.1735	100.0	103.9	ug/L	4	10	
Barium	A	0.0700	0.0512	100.0	97.97	ug/L	-2	10	
Beryllium	A	0.1638	0.1379	100.0	102.2	ug/L	2	10	
Cadmium	A	0.0573	0.0458	100.0	98.40	ug/L	-2	10	
Calcium	A	0.0221	0.0121	10000	10210	ug/L	2	10	
Lead	A	0.4529	0.3268	100.0	101.9	ug/L	2	10	
Magnesium	A	0.3300	0.2521	10000	10040	ug/L	0	10	
Molybdenum	A	0.1492	0.1188	100.0	100.5	ug/L	1	10	
Potassium	A	1.3573	0.3758	10000	9999	ug/L	0	10	
Silver	A	0.4072	0.2106	100.0	104.5	ug/L	5	10	
Thallium	A	0.5818	0.4524	50.00	48.05	ug/L	-4	10	
Arsenic	E	0.4214	0.3435	100.0	100.4	ug/L	0	10	
Chromium	E	4.5530	2.9334	100.0	100.2	ug/L	0	10	
Cobalt	E	6.5886	5.3792	100.0	102.3	ug/L	2	10	
Copper	E	9.9448	5.3050	100.0	101.3	ug/L	1	10	
Manganese	E	1.3415	0.9931	100.0	100.7	ug/L	1	10	
Nickel	E	2.2005	1.5529	100.0	102.0	ug/L	2	10	
Sodium	E	0.9300	0.3399	10000	10160	ug/L	2	10	
Vanadium	E	2.6638	2.0645	100.0	101.4	ug/L	1	10	
Zinc	E	3.3426	0.5882	100.0	98.41	ug/L	-2	10	
Iron	H	0.6443	0.4861	10000	10140	ug/L	1	10	
Selenium	H	0.0868	0.0720	100.0	102.1	ug/L	2	10	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	2111887	-3.66
Scandium	A	2975662	2988045	0.42
Scandium	E	29938	29736	-0.67
Scandium	H	914259	922797	0.93
Germanium	H	243670	244329	0.27
Germanium	E	24961	24782	-0.72
Indium	A	4254937	4058486	-4.62
Bismuth	A	2768004	2610327	-5.70
Yttrium	A	4781284	4684555	-2.02
Terbium	A	5096586	4953557	-2.81

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551025 File : f0910025 Time : 09-JUN-2008 16:44
Cal : 898232551001 Caldate : 09-JUN-2008

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	1.482	ug/L	
Antimony	A	ND	0.1000	0.02880	ug/L	
Barium	A	ND	0.1000	0.02829	ug/L	
Beryllium	A	ND	0.1000	0.02131	ug/L	
Cadmium	A	ND	0.1000	0.01640	ug/L	
Calcium	A	ND	10.00	3.488	ug/L	
Lead	A	ND	0.1000	0.02921	ug/L	
Magnesium	A	ND	10.00	4.248	ug/L	
Molybdenum	A	ND	0.1000	0.07024	ug/L	
Potassium	A	ND	10.00	6.671	ug/L	
Silver	A	ND	0.1000	0.01096	ug/L	
Thallium	A	ND	0.05000	0.007767	ug/L	
Arsenic	E	ND	0.1000	0.04450	ug/L	
Chromium	E	ND	0.1000	0.04322	ug/L	
Cobalt	E	ND	0.1000	0.01314	ug/L	
Copper	E	ND	0.1000	0.07210	ug/L	
Manganese	E	ND	0.1000	0.03907	ug/L	
Nickel	E	ND	0.1000	0.06568	ug/L	
Sodium	E	ND	10.00	8.044	ug/L	
Vanadium	E	ND	0.1000	0.02786	ug/L	
Zinc	E	0.3924	0.1000	0.6420	ug/L	ib ***
Iron	H	ND	10.00	4.521	ug/L	
Selenium	H	ND	0.1000	0.02970	ug/L	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	2071617	-5.50
Scandium	A	2975662	2736354	-8.04
Scandium	E	29938	30488	1.84
Scandium	H	914259	943199	3.17
Germanium	H	243670	255233	4.75
Germanium	E	24961	26005	4.18
Indium	A	4254937	3976993	-6.53
Bismuth	A	2768004	2660367	-3.89
Yttrium	A	4781284	4429082	-7.37
Terbium	A	5096586	4780790	-6.20

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551026 File : f0910026 Time : 09-JUN-2008 16:56
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9403, S9405

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.1753	0.1000	ug/L	!a+
Barium	A	4.816	0.1000	ug/L	!a+
Beryllium	A	[0.02530]	0.1000	ug/L	!a+
Cadmium	A	1.520	0.1000	ug/L	!a+
Lead	A	0.7095	0.1000	ug/L	!a+
Silver	A	0.4743	0.1000	ug/L	!a+
Thallium	A	[0.04900]	0.05000	ug/L	!a+
Arsenic	E	0.2826	0.1000	ug/L	!a+
Chromium	E	2.229	0.1000	ug/L	!a+
Cobalt	E	0.2462	0.1000	ug/L	!a+
Copper	E	2.411	0.1000	ug/L	!a+
Manganese	E	0.8066	0.1000	ug/L	!a+
Nickel	E	1.564	0.1000	ug/L	!a+
Vanadium	E	0.1007	0.1000	ug/L	!a+
Zinc	E	8.020	0.1000	ug/L	!a+
Selenium	H	[0.06400]	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	95410	ug/L	95
Calcium	A	300000	305900	ug/L	102
Magnesium	A	100000	90890	ug/L	91
Molybdenum	A	2000	1999	ug/L	100
Potassium	A	100000	99040	ug/L	99
Sodium	E	250000	247800	ug/L	99
Iron	H	250000	252600	ug/L	101

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	1593884	-27.29
Scandium	A	2975662	2679753	-9.94
Yttrium	E	29938	29113	-2.76
Vanadium	H	914259	803713	-12.09
Germanium	H	243670	206062	-15.43
Germanium	E	24961	22485	-9.92
Indium	A	4254937	3446764	-18.99
Bismuth	A	2768004	2043431	-26.18
Yttrium	A	4781284	4312592	-9.80
Terbium	A	5096586	4412093	-13.43

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551027 File : f0910027 Time : 09-JUN-2008 17:08
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9404, S9405

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	90950	ug/L	-9		
Cadmium	A	100.0	93.45	ug/L	-7	20	
Calcium	A	300000	291200	ug/L	-3		
Magnesium	A	100000	86220	ug/L	-14		
Molybdenum	A	2000	1891	ug/L	-5		
Potassium	A	100000	94500	ug/L	-6		
Silver	A	50.00	47.50	ug/L	-5	20	
Arsenic	E	100.0	99.46	ug/L	-1	20	
Chromium	E	200.0	188.2	ug/L	-6	20	
Cobalt	E	200.0	179.7	ug/L	-10	20	
Copper	E	200.0	175.0	ug/L	-13	20	
Manganese	E	200.0	186.1	ug/L	-7	20	
Nickel	E	200.0	171.9	ug/L	-14	20	
Sodium	E	250000	240100	ug/L	-4		
Vanadium	E	200.0	194.5	ug/L	-3	20	
Zinc	E	100.0	86.93	ug/L	-13	20	
Iron	H	250000	243400	ug/L	-3		
Selenium	H	100.0	95.87	ug/L	-4	20	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	914259	780554	-14.62
Scandium	A	2975662	2613567	-12.17
Scandium	E	29938	26960	-9.95
Germanium	H	243670	201481	-17.31
Germanium	E	24961	21148	-15.28
Indium	A	4254937	3359470	-21.05
Yttrium	A	4781284	4233349	-11.46

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551037 File : f0910037 Time : 09-JUN-2008 19:09
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9402, S9405

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4098	0.3031	10000	9806	ug/L	-2	10	
Antimony	A	0.2567	0.1727	100.0	103.4	ug/L	3	10	
Barium	A	0.0700	0.0507	100.0	96.89	ug/L	-3	10	
Beryllium	A	0.1638	0.1381	100.0	102.4	ug/L	2	10	
Cadmium	A	0.0573	0.0460	100.0	98.92	ug/L	-1	10	
Calcium	A	0.0221	0.0121	10000	10210	ug/L	2	10	
Lead	A	0.4529	0.3254	100.0	101.5	ug/L	2	10	
Magnesium	A	0.3300	0.2499	10000	9957	ug/L	0	10	
Molybdenum	A	0.1492	0.1209	100.0	102.3	ug/L	2	10	
Potassium	A	1.3573	0.3778	10000	10050	ug/L	1	10	
Silver	A	0.4072	0.2095	100.0	104.0	ug/L	4	10	
Thallium	A	0.5818	0.4535	50.00	48.17	ug/L	-4	10	
Arsenic	E	0.4214	0.3485	100.0	101.9	ug/L	2	10	
Chromium	E	4.5530	2.9182	100.0	99.67	ug/L	0	10	
Cobalt	E	6.5886	5.3539	100.0	101.9	ug/L	2	10	
Copper	E	9.9448	5.2804	100.0	100.8	ug/L	1	10	
Manganese	E	1.3415	0.9912	100.0	100.5	ug/L	1	10	
Nickel	E	2.2005	1.5415	100.0	101.2	ug/L	1	10	
Sodium	E	0.9300	0.3363	10000	10050	ug/L	1	10	
Vanadium	E	2.6638	2.0598	100.0	101.1	ug/L	1	10	
Zinc	E	3.3426	0.5917	100.0	98.99	ug/L	-1	10	
Iron	H	0.6443	0.4858	10000	10130	ug/L	1	10	
Selenium	H	0.0868	0.0735	100.0	104.3	ug/L	4	10	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	2087497	-4.77
Scandium	A	2975662	3003956	0.95
Scandium	E	29938	30047	0.36
Vanadium	H	914259	924094	1.08
Germanium	H	243670	244492	0.34
Germanium	E	24961	24947	-0.06
Indium	A	4254937	4175785	-1.86
Bismuth	A	2768004	2718300	-1.80
Yttrium	A	4781284	4798985	0.37
Terbium	A	5096586	5167131	1.38

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551039 File : f0910039 Time : 09-JUN-2008 19:34
Cal : 898232551001 Caldate : 09-JUN-2008

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	[1.573]	10.00	1.482	ug/L	!ib
Antimony	A	ND	0.1000	0.02880	ug/L	
Barium	A	ND	0.1000	0.02829	ug/L	
Beryllium	A	ND	0.1000	0.02131	ug/L	
Cadmium	A	[0.01820]	0.1000	0.01640	ug/L	!ib
Calcium	A	ND	10.00	3.488	ug/L	
Lead	A	ND	0.1000	0.02921	ug/L	
Magnesium	A	ND	10.00	4.248	ug/L	
Molybdenum	A	ND	0.1000	0.07024	ug/L	
Potassium	A	ND	10.00	6.671	ug/L	
Silver	A	[0.01450]	0.1000	0.01096	ug/L	!ib
Thallium	A	ND	0.05000	0.007767	ug/L	
Arsenic	E	ND	0.1000	0.04450	ug/L	
Chromium	E	ND	0.1000	0.04322	ug/L	
Cobalt	E	ND	0.1000	0.01314	ug/L	
Copper	E	ND	0.1000	0.07210	ug/L	
Manganese	E	ND	0.1000	0.03907	ug/L	
Nickel	E	ND	0.1000	0.06568	ug/L	
Sodium	E	ND	10.00	8.044	ug/L	
Vanadium	E	ND	0.1000	0.02786	ug/L	
Zinc	E	0.3642	0.1000	0.6420	ug/L	ib ***
Iron	H	ND	10.00	4.521	ug/L	
Selenium	H	ND	0.1000	0.02970	ug/L	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	2093200	-4.51
Scandium	A	2975662	2918529	-1.92
Scandium	E	29938	29467	-1.57
Scandium	H	914259	927970	1.50
Germanium	H	243670	250384	2.76
Germanium	E	24961	25481	2.08
Indium	A	4254937	4207698	-1.11
Bismuth	A	2768004	2792202	0.87
Yttrium	A	4781284	4756316	-0.52
Terbium	A	5096586	5094664	-0.04

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551050 File : f0910050 Time : 09-JUN-2008 21:47
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9402, S9405

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4098	0.2954	10000	9558	ug/L	-4	10	
Antimony	A	0.2567	0.1687	100.0	101.0	ug/L	1	10	
Barium	A	0.0700	0.0501	100.0	95.77	ug/L	-4	10	
Beryllium	A	0.1638	0.1332	100.0	98.74	ug/L	-1	10	
Cadmium	A	0.0573	0.0452	100.0	97.15	ug/L	-3	10	
Calcium	A	0.0221	0.0118	10000	9992	ug/L	0	10	
Lead	A	0.4529	0.3184	100.0	99.29	ug/L	-1	10	
Magnesium	A	0.3300	0.2416	10000	9625	ug/L	-4	10	
Molybdenum	A	0.1492	0.1162	100.0	98.35	ug/L	-2	10	
Potassium	A	1.3573	0.3669	10000	9761	ug/L	-2	10	
Silver	A	0.4072	0.2061	100.0	102.3	ug/L	2	10	
Thallium	A	0.5818	0.4400	50.00	46.73	ug/L	-7	10	
Arsenic	E	0.4214	0.3448	100.0	100.8	ug/L	1	10	
Chromium	E	4.5530	2.8991	100.0	99.02	ug/L	-1	10	
Cobalt	E	6.5886	5.3304	100.0	101.4	ug/L	1	10	
Copper	E	9.9448	5.1111	100.0	97.60	ug/L	-2	10	
Manganese	E	1.3415	0.9947	100.0	100.8	ug/L	1	10	
Nickel	E	2.2005	1.5215	100.0	99.94	ug/L	0	10	
Sodium	E	0.9300	0.3296	10000	9844	ug/L	-2	10	
Vanadium	E	2.6638	2.0456	100.0	100.4	ug/L	0	10	
Zinc	E	3.3426	0.5812	100.0	97.21	ug/L	-3	10	
Iron	H	0.6443	0.4904	10000	10230	ug/L	2	10	
Selenium	H	0.0868	0.0730	100.0	103.4	ug/L	3	10	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	2112129	-3.65
Scandium	A	2975662	3005662	1.01
Scandium	E	29938	29195	-2.48
Scandium	H	914259	864858	-5.40
Germanium	H	243670	233497	-4.17
Germanium	E	24961	24744	-0.87
Indium	A	4254937	4163324	-2.15
Bismuth	A	2768004	2706257	-2.23
Yttrium	A	4781284	4823177	0.88
Terbium	A	5096586	5143296	0.92

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551051 File : f0910051 Time : 09-JUN-2008 21:59
Cal : 898232551001 Caldate : 09-JUN-2008

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	[2.317]	10.00	1.482	ug/L	!ib
Antimony	A	ND	0.1000	0.02880	ug/L	
Barium	A	ND	0.1000	0.02829	ug/L	
Beryllium	A	[0.02350]	0.1000	0.02131	ug/L	!ib
Cadmium	A	[0.02300]	0.1000	0.01640	ug/L	!ib
Calcium	A	ND	10.00	3.488	ug/L	
Lead	A	ND	0.1000	0.02921	ug/L	
Magnesium	A	ND	10.00	4.248	ug/L	
Molybdenum	A	ND	0.1000	0.07024	ug/L	
Potassium	A	ND	10.00	6.671	ug/L	
Silver	A	[0.02140]	0.1000	0.01096	ug/L	!ib
Thallium	A	[0.01800]	0.05000	0.007767	ug/L	!ib
Arsenic	E	ND	0.1000	0.04450	ug/L	
Chromium	E	ND	0.1000	0.04322	ug/L	
Cobalt	E	[0.01650]	0.1000	0.01314	ug/L	!ib
Copper	E	ND	0.1000	0.07210	ug/L	
Manganese	E	ND	0.1000	0.03907	ug/L	
Nickel	E	ND	0.1000	0.06568	ug/L	
Sodium	E	ND	10.00	8.044	ug/L	
Vanadium	E	[0.03090]	0.1000	0.02786	ug/L	!ib
Zinc	E	ND	0.1000	0.6420	ug/L	
Iron	H	ND	10.00	4.521	ug/L	
Selenium	H	ND	0.1000	0.02970	ug/L	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	2115695	-3.49
Scandium	A	2975662	2947212	-0.96
Scandium	E	29938	29406	-1.78
Scandium	H	914259	882331	-3.49
Germanium	H	243670	239037	-1.90
Germanium	E	24961	25214	1.01
Indium	A	4254937	4202084	-1.24
Bismuth	A	2768004	2770751	0.10
Yttrium	A	4781284	4726887	-1.14
Terbium	A	5096586	5073804	-0.45

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551061 File : f0910061 Time : 09-JUN-2008 23:55
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9402, S9405

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4098	0.3007	10000	9731	ug/L	-3	10	
Antimony	A	0.2567	0.1720	100.0	103.0	ug/L	3	10	
Barium	A	0.0700	0.0511	100.0	97.74	ug/L	-2	10	
Beryllium	A	0.1638	0.1386	100.0	102.7	ug/L	3	10	
Cadmium	A	0.0573	0.0459	100.0	98.57	ug/L	-1	10	
Calcium	A	0.0221	0.0119	10000	10090	ug/L	1	10	
Lead	A	0.4529	0.3214	100.0	100.2	ug/L	0	10	
Magnesium	A	0.3300	0.2459	10000	9797	ug/L	-2	10	
Molybdenum	A	0.1492	0.1191	100.0	100.7	ug/L	1	10	
Potassium	A	1.3573	0.3739	10000	9950	ug/L	-1	10	
Silver	A	0.4072	0.2113	100.0	104.8	ug/L	5	10	
Thallium	A	0.5818	0.4470	50.00	47.47	ug/L	-5	10	
Arsenic	E	0.4214	0.3430	100.0	100.3	ug/L	0	10	
Chromium	E	4.5530	2.8814	100.0	98.42	ug/L	-2	10	
Cobalt	E	6.5886	5.2923	100.0	100.7	ug/L	1	10	
Copper	E	9.9448	5.1157	100.0	97.68	ug/L	-2	10	
Manganese	E	1.3415	0.9926	100.0	100.6	ug/L	1	10	
Nickel	E	2.2005	1.5146	100.0	99.48	ug/L	-1	10	
Sodium	E	0.9300	0.3240	10000	9675	ug/L	-3	10	
Vanadium	E	2.6638	2.0335	100.0	99.84	ug/L	0	10	
Zinc	E	3.3426	0.5800	100.0	97.01	ug/L	-3	10	
Iron	H	0.6443	0.4886	10000	10190	ug/L	2	10	
Selenium	H	0.0868	0.0727	100.0	103.1	ug/L	3	10	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	2040664	-6.91
Scandium	A	2975662	2984674	0.30
Scandium	E	29938	29682	-0.86
Scandium	H	914259	884859	-3.22
Germanium	H	243670	238012	-2.32
Germanium	E	24961	24986	0.10
Indium	A	4254937	4058838	-4.61
Bismuth	A	2768004	2617904	-5.42
Yttrium	A	4781284	4750021	-0.65
Terbium	A	5096586	4998735	-1.92

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551063 File : f0910063 Time : 10-JUN-2008 00:19
Cal : 898232551001 Caldate : 09-JUN-2008

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	1.482	ug/L	
Antimony	A	ND	0.1000	0.02880	ug/L	
Barium	A	ND	0.1000	0.02829	ug/L	
Beryllium	A	ND	0.1000	0.02131	ug/L	
Cadmium	A	ND	0.1000	0.01640	ug/L	
Calcium	A	ND	10.00	3.488	ug/L	
Lead	A	ND	0.1000	0.02921	ug/L	
Magnesium	A	ND	10.00	4.248	ug/L	
Molybdenum	A	ND	0.1000	0.07024	ug/L	
Potassium	A	ND	10.00	6.671	ug/L	
Silver	A	ND	0.1000	0.01096	ug/L	
Thallium	A	[0.008000]	0.05000	0.007767	ug/L	!ib
Arsenic	E	ND	0.1000	0.04450	ug/L	
Chromium	E	ND	0.1000	0.04322	ug/L	
Cobalt	E	[0.01850]	0.1000	0.01314	ug/L	!ib
Copper	E	ND	0.1000	0.07210	ug/L	
Manganese	E	ND	0.1000	0.03907	ug/L	
Nickel	E	ND	0.1000	0.06568	ug/L	
Sodium	E	ND	10.00	8.044	ug/L	
Vanadium	E	ND	0.1000	0.02786	ug/L	
Zinc	E	0.4206	0.1000	0.6420	ug/L	ib ***
Iron	H	ND	10.00	4.521	ug/L	
Selenium	H	ND	0.1000	0.02970	ug/L	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	2159109	-1.51
Scandium	A	2975662	3053738	2.62
Scandium	E	29938	29651	-0.96
Scandium	H	914259	882576	-3.47
Germanium	H	243670	242066	-0.66
Germanium	E	24961	25425	1.86
Indium	A	4254937	4299678	1.05
Bismuth	A	2768004	2820661	1.90
Yttrium	A	4781284	4871286	1.88
Terbium	A	5096586	5182484	1.69

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551064 File : f0910064 Time : 10-JUN-2008 00:31
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9403, S9405

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.1774	0.1000	ug/L	!a+
Barium	A	4.838	0.1000	ug/L	!a+
Beryllium	A	[0.03370]	0.1000	ug/L	!a+
Cadmium	A	1.564	0.1000	ug/L	!a+
Lead	A	0.7066	0.1000	ug/L	!a+
Silver	A	0.4576	0.1000	ug/L	!a+
Thallium	A	[0.04630]	0.05000	ug/L	!a+
Arsenic	E	0.2728	0.1000	ug/L	!a+
Chromium	E	2.274	0.1000	ug/L	!a+
Cobalt	E	0.2497	0.1000	ug/L	!a+
Copper	E	2.402	0.1000	ug/L	!a+
Manganese	E	0.9086	0.1000	ug/L	!a+
Nickel	E	1.594	0.1000	ug/L	!a+
Vanadium	E	0.1194	0.1000	ug/L	!a+
Zinc	E	7.893	0.1000	ug/L	!a+
Selenium	H	[0.08590]	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	94880	ug/L	95
Calcium	A	300000	302300	ug/L	101
Magnesium	A	100000	90580	ug/L	91
Molybdenum	A	2000	1967	ug/L	98
Potassium	A	100000	98140	ug/L	98
Sodium	E	250000	243100	ug/L	97
Iron	H	250000	250600	ug/L	100

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	1608427	-26.63
Scandium	A	2975662	2647961	-11.01
Scandium	E	29938	26907	-10.12
Scandium	H	914259	744944	-18.52
Germanium	H	243670	191862	-21.26
Germanium	E	24961	21113	-15.42
Indium	A	4254937	3418944	-19.65
Bismuth	A	2768004	2034671	-26.49
Yttrium	A	4781284	4251954	-11.07
Terbium	A	5096586	4317114	-15.29

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551065 File : f0910065 Time : 10-JUN-2008 00:44
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9404, S9405

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	90580	ug/L	-9		
Cadmium	A	100.0	92.36	ug/L	-8	20	
Calcium	A	300000	290200	ug/L	-3		
Magnesium	A	100000	86040	ug/L	-14		
Molybdenum	A	2000	1890	ug/L	-6		
Potassium	A	100000	94910	ug/L	-5		
Silver	A	50.00	47.10	ug/L	-6	20	
Arsenic	E	100.0	98.42	ug/L	-2	20	
Chromium	E	200.0	185.8	ug/L	-7	20	
Cobalt	E	200.0	177.0	ug/L	-12	20	
Copper	E	200.0	170.7	ug/L	-15	20	
Manganese	E	200.0	184.3	ug/L	-8	20	
Nickel	E	200.0	169.0	ug/L	-16	20	
Sodium	E	250000	232700	ug/L	-7		
Vanadium	E	200.0	191.7	ug/L	-4	20	
Zinc	E	100.0	85.12	ug/L	-15	20	
Iron	H	250000	241800	ug/L	-3		
Selenium	H	100.0	94.97	ug/L	-5	20	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	914259	749393	-18.03
Scandium	A	2975662	2651277	-10.90
Scandium	E	29938	26614	-11.10
Germanium	H	243670	194477	-20.19
Germanium	E	24961	21020	-15.79
Indium	A	4254937	3426073	-19.48
Yttrium	A	4781284	4244541	-11.23

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551076 File : f0910076 Time : 10-JUN-2008 02:57
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9402, S9405

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4098	0.2971	10000	9613	ug/L	-4	10	
Antimony	A	0.2567	0.1698	100.0	101.7	ug/L	2	10	
Barium	A	0.0700	0.0505	100.0	96.49	ug/L	-4	10	
Beryllium	A	0.1638	0.1361	100.0	100.8	ug/L	1	10	
Cadmium	A	0.0573	0.0455	100.0	97.80	ug/L	-2	10	
Calcium	A	0.0221	0.0118	10000	10010	ug/L	0	10	
Lead	A	0.4529	0.3184	100.0	99.30	ug/L	-1	10	
Magnesium	A	0.3300	0.2420	10000	9641	ug/L	-4	10	
Molybdenum	A	0.1492	0.1176	100.0	99.53	ug/L	0	10	
Potassium	A	1.3573	0.3701	10000	9847	ug/L	-2	10	
Silver	A	0.4072	0.2098	100.0	104.1	ug/L	4	10	
Thallium	A	0.5818	0.4473	50.00	47.50	ug/L	-5	10	
Arsenic	E	0.4214	0.3415	100.0	99.84	ug/L	0	10	
Chromium	E	4.5530	2.8810	100.0	98.40	ug/L	-2	10	
Cobalt	E	6.5886	5.3281	100.0	101.4	ug/L	1	10	
Copper	E	9.9448	5.1470	100.0	98.28	ug/L	-2	10	
Manganese	E	1.3415	0.9900	100.0	100.3	ug/L	0	10	
Nickel	E	2.2005	1.5230	100.0	100.0	ug/L	0	10	
Sodium	E	0.9300	0.3266	10000	9753	ug/L	-2	10	
Vanadium	E	2.6638	2.0410	100.0	100.2	ug/L	0	10	
Zinc	E	3.3426	0.5767	100.0	96.46	ug/L	-4	10	
Iron	H	0.6443	0.4848	10000	10110	ug/L	1	10	
Selenium	H	0.0868	0.0719	100.0	102.0	ug/L	2	10	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	2028836	-7.45
Scandium	A	2975662	2981247	0.19
Scandium	E	29938	28276	-5.55
Scandium	H	914259	865999	-5.28
Germanium	H	243670	233052	-4.36
Germanium	E	24961	23862	-4.40
Indium	A	4254937	4088470	-3.91
Bismuth	A	2768004	2636401	-4.75
Yttrium	A	4781284	4780684	-0.01
Terbium	A	5096586	5047552	-0.96

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551078 File : f0910078 Time : 10-JUN-2008 03:21
Cal : 898232551001 Caldate : 09-JUN-2008

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	1.482	ug/L	
Antimony	A	ND	0.1000	0.02880	ug/L	
Barium	A	ND	0.1000	0.02829	ug/L	
Beryllium	A	ND	0.1000	0.02131	ug/L	
Cadmium	A	ND	0.1000	0.01640	ug/L	
Calcium	A	ND	10.00	3.488	ug/L	
Lead	A	ND	0.1000	0.02921	ug/L	
Magnesium	A	ND	10.00	4.248	ug/L	
Molybdenum	A	ND	0.1000	0.07024	ug/L	
Potassium	A	ND	10.00	6.671	ug/L	
Silver	A	ND	0.1000	0.01096	ug/L	
Thallium	A	[0.008000]	0.05000	0.007767	ug/L	!ib
Arsenic	E	ND	0.1000	0.04450	ug/L	
Chromium	E	ND	0.1000	0.04322	ug/L	
Cobalt	E	[0.01650]	0.1000	0.01314	ug/L	!ib
Copper	E	ND	0.1000	0.07210	ug/L	
Manganese	E	ND	0.1000	0.03907	ug/L	
Nickel	E	ND	0.1000	0.06568	ug/L	
Sodium	E	ND	10.00	8.044	ug/L	
Vanadium	E	ND	0.1000	0.02786	ug/L	
Zinc	E	0.4575	0.1000	0.6420	ug/L	ib ***
Iron	H	ND	10.00	4.521	ug/L	
Selenium	H	ND	0.1000	0.02970	ug/L	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	2038888	-6.99
Scandium	A	2975662	2845778	-4.36
Scandium	E	29938	27483	-8.20
Scandium	H	914259	859463	-5.99
Germanium	H	243670	233393	-4.22
Germanium	E	24961	23808	-4.62
Indium	A	4254937	4092914	-3.81
Bismuth	A	2768004	2712414	-2.01
Yttrium	A	4781284	4621049	-3.35
Terbium	A	5096586	4936844	-3.13

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551088 File : f0910088 Time : 10-JUN-2008 05:23
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9402, S9405

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4098	0.2978	10000	9635	ug/L	-4	10	
Antimony	A	0.2567	0.1670	100.0	100.0	ug/L	0	10	
Barium	A	0.0700	0.0505	100.0	96.58	ug/L	-3	10	
Beryllium	A	0.1638	0.1365	100.0	101.2	ug/L	1	10	
Cadmium	A	0.0573	0.0449	100.0	96.56	ug/L	-3	10	
Calcium	A	0.0221	0.0117	10000	9916	ug/L	-1	10	
Lead	A	0.4529	0.3166	100.0	98.73	ug/L	-1	10	
Magnesium	A	0.3300	0.2417	10000	9629	ug/L	-4	10	
Molybdenum	A	0.1492	0.1172	100.0	99.18	ug/L	-1	10	
Potassium	A	1.3573	0.3693	10000	9825	ug/L	-2	10	
Silver	A	0.4072	0.2055	100.0	102.0	ug/L	2	10	
Thallium	A	0.5818	0.4452	50.00	47.28	ug/L	-5	10	
Arsenic	E	0.4214	0.3408	100.0	99.63	ug/L	0	10	
Chromium	E	4.5530	2.9040	100.0	99.19	ug/L	-1	10	
Cobalt	E	6.5886	5.3309	100.0	101.4	ug/L	1	10	
Copper	E	9.9448	5.1359	100.0	98.07	ug/L	-2	10	
Manganese	E	1.3415	0.9961	100.0	101.0	ug/L	1	10	
Nickel	E	2.2005	1.5324	100.0	100.6	ug/L	1	10	
Sodium	E	0.9300	0.3254	10000	9717	ug/L	-3	10	
Vanadium	E	2.6638	2.0659	100.0	101.4	ug/L	1	10	
Zinc	E	3.3426	0.5759	100.0	96.33	ug/L	-4	10	
Iron	H	0.6443	0.4791	10000	9990	ug/L	0	10	
Selenium	H	0.0868	0.0723	100.0	102.5	ug/L	3	10	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	2059062	-6.07
Scandium	A	2975662	2968404	-0.24
Scandium	E	29938	27840	-7.01
Yttrium	H	914259	856614	-6.31
Germanium	H	243670	229921	-5.64
Germanium	E	24961	23643	-5.28
Indium	A	4254937	4049896	-4.82
Bismuth	A	2768004	2572032	-7.08
Yttrium	A	4781284	4704504	-1.61
Terbium	A	5096586	4934152	-3.19

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551090 File : f0910090 Time : 10-JUN-2008 05:47
Cal : 898232551001 Caldate : 09-JUN-2008

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	1.482	ug/L	
Antimony	A	ND	0.1000	0.02880	ug/L	
Barium	A	ND	0.1000	0.02829	ug/L	
Beryllium	A	ND	0.1000	0.02131	ug/L	
Cadmium	A	ND	0.1000	0.01640	ug/L	
Calcium	A	ND	10.00	3.488	ug/L	
Lead	A	ND	0.1000	0.02921	ug/L	
Magnesium	A	ND	10.00	4.248	ug/L	
Molybdenum	A	ND	0.1000	0.07024	ug/L	
Potassium	A	ND	10.00	6.671	ug/L	
Silver	A	ND	0.1000	0.01096	ug/L	
Thallium	A	ND	0.05000	0.007767	ug/L	
Arsenic	E	ND	0.1000	0.04450	ug/L	
Chromium	E	ND	0.1000	0.04322	ug/L	
Cobalt	E	[0.01380]	0.1000	0.01314	ug/L	!ib
Copper	E	ND	0.1000	0.07210	ug/L	
Manganese	E	ND	0.1000	0.03907	ug/L	
Nickel	E	ND	0.1000	0.06568	ug/L	
Sodium	E	ND	10.00	8.044	ug/L	
Vanadium	E	ND	0.1000	0.02786	ug/L	
Zinc	E	0.3380	0.1000	0.6420	ug/L	ib ***
Iron	H	ND	10.00	4.521	ug/L	
Selenium	H	ND	0.1000	0.02970	ug/L	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	2060795	-5.99
Scandium	A	2975662	2926512	-1.65
Scandium	E	29938	27077	-9.56
Scandium	H	914259	826943	-9.55
Germanium	H	243670	225674	-7.39
Germanium	E	24961	23247	-6.87
Indium	A	4254937	4089084	-3.90
Bismuth	A	2768004	2660559	-3.88
Yttrium	A	4781284	4647828	-2.79
Terbium	A	5096586	4870672	-4.43

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551091 File : f0910091 Time : 10-JUN-2008 05:59
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9403, S9405

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.1700	0.1000	ug/L	!a+
Barium	A	4.782	0.1000	ug/L	!a+
Beryllium	A	[0.02440]	0.1000	ug/L	!a+
Cadmium	A	1.500	0.1000	ug/L	!a+
Lead	A	0.6900	0.1000	ug/L	!a+
Silver	A	0.4504	0.1000	ug/L	!a+
Thallium	A	[0.04940]	0.05000	ug/L	!a+
Arsenic	E	0.2786	0.1000	ug/L	!a+
Chromium	E	2.240	0.1000	ug/L	!a+
Cobalt	E	0.2421	0.1000	ug/L	!a+
Copper	E	2.417	0.1000	ug/L	!a+
Manganese	E	0.8215	0.1000	ug/L	!a+
Nickel	E	1.607	0.1000	ug/L	!a+
Vanadium	E	0.1027	0.1000	ug/L	!a+
Zinc	E	7.816	0.1000	ug/L	!a+
Selenium	H	[0.08400]	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	94050	ug/L	94
Calcium	A	300000	298300	ug/L	99
Magnesium	A	100000	89480	ug/L	89
Molybdenum	A	2000	1964	ug/L	98
Potassium	A	100000	97500	ug/L	98
Sodium	E	250000	237700	ug/L	95
Iron	H	250000	246100	ug/L	98

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	1573024	-28.24
Scandium	A	2975662	2600767	-12.60
Indium	E	29938	25687	-14.20
Scandium	H	914259	719465	-21.31
Germanium	H	243670	184019	-24.48
Germanium	E	24961	20086	-19.53
Indium	A	4254937	3284306	-22.81
Bismuth	A	2768004	1968014	-28.90
Yttrium	A	4781284	4105277	-14.14
Terbium	A	5096586	4205619	-17.48

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551092 File : f0910092 Time : 10-JUN-2008 06:11
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9404, S9405

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	90020	ug/L	-10		
Cadmium	A	100.0	90.87	ug/L	-9	20	
Calcium	A	300000	286500	ug/L	-5		
Magnesium	A	100000	86020	ug/L	-14		
Molybdenum	A	2000	1877	ug/L	-6		
Potassium	A	100000	94020	ug/L	-6		
Silver	A	50.00	46.56	ug/L	-7	20	
Arsenic	E	100.0	99.25	ug/L	-1	20	
Chromium	E	200.0	187.6	ug/L	-6	20	
Cobalt	E	200.0	179.3	ug/L	-10	20	
Copper	E	200.0	173.8	ug/L	-13	20	
Manganese	E	200.0	186.4	ug/L	-7	20	
Nickel	E	200.0	170.9	ug/L	-15	20	
Sodium	E	250000	231100	ug/L	-8		
Vanadium	E	200.0	194.0	ug/L	-3	20	
Zinc	E	100.0	85.45	ug/L	-15	20	
Iron	H	250000	238800	ug/L	-4		
Selenium	H	100.0	94.94	ug/L	-5	20	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	914259	721070	-21.13
Scandium	A	2975662	2602807	-12.53
Scandium	E	29938	24903	-16.82
Germanium	H	243670	185713	-23.79
Germanium	E	24961	19623	-21.39
Indium	A	4254937	3327164	-21.80
Yttrium	A	4781284	4139655	-13.42

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551103 File : f0910103 Time : 10-JUN-2008 08:25
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9402, S9405

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4098	0.2910	10000	9414	ug/L	-6	10	
Antimony	A	0.2567	0.1690	100.0	101.2	ug/L	1	10	
Barium	A	0.0700	0.0503	100.0	96.20	ug/L	-4	10	
Beryllium	A	0.1638	0.1368	100.0	101.4	ug/L	1	10	
Cadmium	A	0.0573	0.0444	100.0	95.46	ug/L	-5	10	
Calcium	A	0.0221	0.0116	10000	9844	ug/L	-2	10	
Lead	A	0.4529	0.3126	100.0	97.49	ug/L	-3	10	
Magnesium	A	0.3300	0.2374	10000	9456	ug/L	-5	10	
Molybdenum	A	0.1492	0.1165	100.0	98.59	ug/L	-1	10	
Potassium	A	1.3573	0.3661	10000	9739	ug/L	-3	10	
Silver	A	0.4072	0.2046	100.0	101.5	ug/L	2	10	
Thallium	A	0.5818	0.4468	50.00	47.45	ug/L	-5	10	
Arsenic	E	0.4214	0.3400	100.0	99.41	ug/L	-1	10	
Chromium	E	4.5530	2.9056	100.0	99.24	ug/L	-1	10	
Cobalt	E	6.5886	5.3886	100.0	102.5	ug/L	3	10	
Copper	E	9.9448	5.1308	100.0	97.97	ug/L	-2	10	
Manganese	E	1.3415	0.9884	100.0	100.2	ug/L	0	10	
Nickel	E	2.2005	1.5406	100.0	101.2	ug/L	1	10	
Sodium	E	0.9300	0.3218	10000	9611	ug/L	-4	10	
Vanadium	E	2.6638	2.0548	100.0	100.9	ug/L	1	10	
Zinc	E	3.3426	0.5791	100.0	96.87	ug/L	-3	10	
Iron	H	0.6443	0.4871	10000	10160	ug/L	2	10	
Selenium	H	0.0868	0.0719	100.0	102.0	ug/L	2	10	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	1923678	-12.25
Scandium	A	2975662	2886431	-3.00
Scandium	E	29938	25841	-13.68
Scandium	H	914259	806300	-11.81
Germanium	H	243670	216984	-10.95
Germanium	E	24961	22175	-11.16
Indium	A	4254937	3969632	-6.71
Bismuth	A	2768004	2491030	-10.01
Yttrium	A	4781284	4586412	-4.08
Terbium	A	5096586	4837517	-5.08

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551105 File : f0910105 Time : 10-JUN-2008 08:52
Cal : 898232551001 Caldate : 09-JUN-2008

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	1.482	ug/L	
Antimony	A	ND	0.1000	0.02880	ug/L	
Barium	A	ND	0.1000	0.02829	ug/L	
Beryllium	A	ND	0.1000	0.02131	ug/L	
Cadmium	A	ND	0.1000	0.01640	ug/L	
Calcium	A	ND	10.00	3.488	ug/L	
Lead	A	ND	0.1000	0.02921	ug/L	
Magnesium	A	ND	10.00	4.248	ug/L	
Molybdenum	A	ND	0.1000	0.07024	ug/L	
Potassium	A	ND	10.00	6.671	ug/L	
Silver	A	ND	0.1000	0.01096	ug/L	
Thallium	A	[0.008300]	0.05000	0.007767	ug/L	!ib
Arsenic	E	ND	0.1000	0.04450	ug/L	
Chromium	E	ND	0.1000	0.04322	ug/L	
Cobalt	E	ND	0.1000	0.01314	ug/L	
Copper	E	ND	0.1000	0.07210	ug/L	
Manganese	E	ND	0.1000	0.03907	ug/L	
Nickel	E	ND	0.1000	0.06568	ug/L	
Sodium	E	ND	10.00	8.044	ug/L	
Vanadium	E	ND	0.1000	0.02786	ug/L	
Zinc	E	0.4953	0.1000	0.6420	ug/L	ib ***
Iron	H	ND	10.00	4.521	ug/L	
Selenium	H	ND	0.1000	0.02970	ug/L	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	1963057	-10.45
Scandium	A	2975662	2826456	-5.01
Scandium	E	29938	26357	-11.96
Scandium	H	914259	800549	-12.44
Germanium	H	243670	221280	-9.19
Germanium	E	24961	22528	-9.75
Indium	A	4254937	4043401	-4.97
Bismuth	A	2768004	2642544	-4.53
Yttrium	A	4781284	4597763	-3.84
Terbium	A	5096586	4941659	-3.04

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551118 File : f0910118 Time : 10-JUN-2008 11:30
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9402, S9405

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4098	0.2977	10000	9633	ug/L	-4	10	
Antimony	A	0.2567	0.1675	100.0	100.3	ug/L	0	10	
Barium	A	0.0700	0.0509	100.0	97.31	ug/L	-3	10	
Beryllium	A	0.1638	0.1381	100.0	102.3	ug/L	2	10	
Cadmium	A	0.0573	0.0444	100.0	95.29	ug/L	-5	10	
Calcium	A	0.0221	0.0118	10000	10020	ug/L	0	10	
Lead	A	0.4529	0.3137	100.0	97.82	ug/L	-2	10	
Magnesium	A	0.3300	0.2428	10000	9673	ug/L	-3	10	
Molybdenum	A	0.1492	0.1172	100.0	99.12	ug/L	-1	10	
Potassium	A	1.3573	0.3724	10000	9908	ug/L	-1	10	
Silver	A	0.4072	0.2070	100.0	102.7	ug/L	3	10	
Thallium	A	0.5818	0.4457	50.00	47.33	ug/L	-5	10	
Arsenic	E	0.4214	0.3439	100.0	100.5	ug/L	1	10	
Chromium	E	4.5530	2.9593	100.0	101.1	ug/L	1	10	
Cobalt	E	6.5886	5.4460	100.0	103.6	ug/L	4	10	
Copper	E	9.9448	5.1545	100.0	98.42	ug/L	-2	10	
Manganese	E	1.3415	1.0006	100.0	101.4	ug/L	1	10	
Nickel	E	2.2005	1.5732	100.0	103.3	ug/L	3	10	
Sodium	E	0.9300	0.3236	10000	9665	ug/L	-3	10	
Vanadium	E	2.6638	2.0962	100.0	102.9	ug/L	3	10	
Zinc	E	3.3426	0.5779	100.0	96.66	ug/L	-3	10	
Iron	H	0.6443	0.4854	10000	10120	ug/L	1	10	
Selenium	H	0.0868	0.0720	100.0	102.1	ug/L	2	10	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	1902923	-13.19
Scandium	A	2975662	2821972	-5.16
Scandium	E	29938	25045	-16.34
Indium	H	914259	776771	-15.04
Germanium	H	243670	210187	-13.74
Germanium	E	24961	21732	-12.94
Indium	A	4254937	3883849	-8.72
Bismuth	A	2768004	2445620	-11.65
Yttrium	A	4781284	4510116	-5.67
Terbium	A	5096586	4721633	-7.36

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551120 File : f0910120 Time : 10-JUN-2008 11:54
Cal : 898232551001 Caldate : 09-JUN-2008

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	1.482	ug/L	
Antimony	A	ND	0.1000	0.02880	ug/L	
Barium	A	ND	0.1000	0.02829	ug/L	
Beryllium	A	ND	0.1000	0.02131	ug/L	
Cadmium	A	ND	0.1000	0.01640	ug/L	
Calcium	A	ND	10.00	3.488	ug/L	
Lead	A	ND	0.1000	0.02921	ug/L	
Magnesium	A	ND	10.00	4.248	ug/L	
Molybdenum	A	ND	0.1000	0.07024	ug/L	
Potassium	A	ND	10.00	6.671	ug/L	
Silver	A	ND	0.1000	0.01096	ug/L	
Thallium	A	[0.008100]	0.05000	0.007767	ug/L	!ib
Arsenic	E	ND	0.1000	0.04450	ug/L	
Chromium	E	ND	0.1000	0.04322	ug/L	
Cobalt	E	ND	0.1000	0.01314	ug/L	
Copper	E	ND	0.1000	0.07210	ug/L	
Manganese	E	ND	0.1000	0.03907	ug/L	
Nickel	E	ND	0.1000	0.06568	ug/L	
Sodium	E	ND	10.00	8.044	ug/L	
Vanadium	E	ND	0.1000	0.02786	ug/L	
Zinc	E	0.3788	0.1000	0.6420	ug/L	ib ***
Iron	H	ND	10.00	4.521	ug/L	
Selenium	H	ND	0.1000	0.02970	ug/L	calc

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	1946288	-11.22
Scandium	A	2975662	2813360	-5.45
Scandium	E	29938	25217	-15.77
Scandium	H	914259	785260	-14.11
Germanium	H	243670	215111	-11.72
Germanium	E	24961	21998	-11.87
Indium	A	4254937	3932724	-7.57
Bismuth	A	2768004	2537674	-8.32
Yttrium	A	4781284	4487261	-6.15
Terbium	A	5096586	4723994	-7.31

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551131 File : f0910131 Time : 10-JUN-2008 14:08
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9402, S9405

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4098	0.2937	10000	9501	ug/L	-5	10	
Antimony	A	0.2567	0.1669	100.0	99.91	ug/L	0	10	
Barium	A	0.0700	0.0509	100.0	97.37	ug/L	-3	10	
Beryllium	A	0.1638	0.1385	100.0	102.6	ug/L	3	10	
Cadmium	A	0.0573	0.0441	100.0	94.83	ug/L	-5	10	
Calcium	A	0.0221	0.0117	10000	9880	ug/L	-1	10	
Lead	A	0.4529	0.3060	100.0	95.43	ug/L	-5	10	
Magnesium	A	0.3300	0.2402	10000	9569	ug/L	-4	10	
Molybdenum	A	0.1492	0.1155	100.0	97.73	ug/L	-2	10	
Potassium	A	1.3573	0.3699	10000	9841	ug/L	-2	10	
Silver	A	0.4072	0.2055	100.0	101.9	ug/L	2	10	
Thallium	A	0.5818	0.4418	50.00	46.91	ug/L	-6	10	
Arsenic	E	0.4214	0.3352	100.0	97.99	ug/L	-2	10	
Chromium	E	4.5530	2.8514	100.0	97.39	ug/L	-3	10	
Cobalt	E	6.5886	5.2662	100.0	100.2	ug/L	0	10	
Copper	E	9.9448	5.0006	100.0	95.49	ug/L	-5	10	
Manganese	E	1.3415	0.9839	100.0	99.72	ug/L	0	10	
Nickel	E	2.2005	1.5054	100.0	98.88	ug/L	-1	10	
Sodium	E	0.9300	0.3144	10000	9388	ug/L	-6	10	
Vanadium	E	2.6638	2.0236	100.0	99.35	ug/L	-1	10	
Zinc	E	3.3426	0.5652	100.0	94.51	ug/L	-5	10	
Iron	H	0.6443	0.4811	10000	10030	ug/L	0	10	
Selenium	H	0.0868	0.0690	100.0	97.77	ug/L	-2	10	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	1852266	-15.50
Scandium	A	2975662	2840990	-4.53
Scandium	E	29938	25273	-15.58
Indium	H	914259	753784	-17.55
Germanium	H	243670	205765	-15.56
Germanium	E	24961	21705	-13.04
Indium	A	4254937	3842469	-9.69
Bismuth	A	2768004	2366505	-14.51
Yttrium	A	4781284	4510046	-5.67
Terbium	A	5096586	4626144	-9.23

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551132 File : f0910132 Time : 10-JUN-2008 14:20
Cal : 898232551001 Caldate : 09-JUN-2008

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	[4.662]	10.00	1.482	ug/L	!ib
Antimony	A	[0.03650]	0.1000	0.02880	ug/L	!ib
Barium	A	[0.03290]	0.1000	0.02829	ug/L	!ib
Beryllium	A	[0.04400]	0.1000	0.02131	ug/L	!ib
Cadmium	A	[0.03390]	0.1000	0.01640	ug/L	!ib
Calcium	A	ND	10.00	3.488	ug/L	
Lead	A	[0.03090]	0.1000	0.02921	ug/L	!ib
Magnesium	A	[4.259]	10.00	4.248	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07024	ug/L	
Potassium	A	[7.316]	10.00	6.671	ug/L	!ib
Silver	A	[0.02510]	0.1000	0.01096	ug/L	!ib
Thallium	A	[0.03380]	0.05000	0.007767	ug/L	!ib
Arsenic	E	[0.07790]	0.1000	0.04450	ug/L	!ib
Chromium	E	[0.09290]	0.1000	0.04322	ug/L	!ib
Cobalt	E	[0.08000]	0.1000	0.01314	ug/L	!ib
Copper	E	[0.09170]	0.1000	0.07210	ug/L	!ib
Manganese	E	[0.09950]	0.1000	0.03907	ug/L	!ib
Nickel	E	[0.08000]	0.1000	0.06568	ug/L	!ib
Sodium	E	ND	10.00	8.044	ug/L	
Vanadium	E	[0.08940]	0.1000	0.02786	ug/L	!ib
Zinc	E	ND	0.1000	0.6420	ug/L	
Iron	H	[7.010]	10.00	4.521	ug/L	!ib
Selenium	H	[0.06890]	0.1000	0.02970	ug/L	!ib

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	1897622	-13.44
Scandium	A	2975662	2827428	-4.98
Scandium	E	29938	25643	-14.35
Scandium	H	914259	768087	-15.99
Germanium	H	243670	213106	-12.54
Germanium	E	24961	22660	-9.22
Indium	A	4254937	3879700	-8.82
Bismuth	A	2768004	2443035	-11.74
Yttrium	A	4781284	4465041	-6.61
Terbium	A	5096586	4545339	-10.82

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551134 File : f0910134 Time : 10-JUN-2008 14:45
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9403, S9405

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.1796	0.1000	ug/L	!a+
Barium	A	4.855	0.1000	ug/L	!a+
Beryllium	A	[0.02930]	0.1000	ug/L	!a+
Cadmium	A	1.604	0.1000	ug/L	!a+
Lead	A	0.6913	0.1000	ug/L	!a+
Silver	A	0.4439	0.1000	ug/L	!a+
Thallium	A	[0.04710]	0.05000	ug/L	!a+
Arsenic	E	0.2482	0.1000	ug/L	!a+
Chromium	E	2.202	0.1000	ug/L	!a+
Cobalt	E	0.2526	0.1000	ug/L	!a+
Copper	E	2.387	0.1000	ug/L	!a+
Manganese	E	0.8714	0.1000	ug/L	!a+
Nickel	E	1.545	0.1000	ug/L	!a+
Vanadium	E	0.1027	0.1000	ug/L	!a+
Zinc	E	7.698	0.1000	ug/L	!a+
Selenium	H	[0.07310]	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	94790	ug/L	95
Calcium	A	300000	298000	ug/L	99
Magnesium	A	100000	90330	ug/L	90
Molybdenum	A	2000	1936	ug/L	97
Potassium	A	100000	98040	ug/L	98
Sodium	E	250000	227900	ug/L	91
Iron	H	250000	241300	ug/L	97

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	1500614	-31.55
Scandium	A	2975662	2519291	-15.34
Indium	E	29938	22932	-23.40
Scandium	H	914259	652217	-28.66
Germanium	H	243670	168693	-30.77
Germanium	E	24961	18360	-26.45
Indium	A	4254937	3120394	-26.66
Bismuth	A	2768004	1862313	-32.72
Yttrium	A	4781284	3977488	-16.81
Terbium	A	5096586	3935435	-22.78

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551135 File : f0910135 Time : 10-JUN-2008 14:57
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9404, S9405

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	90670	ug/L	-9		
Cadmium	A	100.0	90.90	ug/L	-9	20	
Calcium	A	300000	287400	ug/L	-4		
Magnesium	A	100000	86930	ug/L	-13		
Molybdenum	A	2000	1860	ug/L	-7		
Potassium	A	100000	94520	ug/L	-5		
Silver	A	50.00	46.62	ug/L	-7	20	
Arsenic	E	100.0	97.79	ug/L	-2	20	
Chromium	E	200.0	185.6	ug/L	-7	20	
Cobalt	E	200.0	179.1	ug/L	-10	20	
Copper	E	200.0	170.3	ug/L	-15	20	
Manganese	E	200.0	184.6	ug/L	-8	20	
Nickel	E	200.0	171.6	ug/L	-14	20	
Sodium	E	250000	222900	ug/L	-11		
Vanadium	E	200.0	193.3	ug/L	-3	20	
Zinc	E	100.0	84.13	ug/L	-16	20	
Iron	H	250000	236300	ug/L	-5		
Selenium	H	100.0	93.92	ug/L	-6	20	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	914259	648453	-29.07
Scandium	A	2975662	2441503	-17.95
Scandium	E	29938	22197	-25.86
Germanium	H	243670	168073	-31.02
Germanium	E	24961	17886	-28.34
Indium	A	4254937	3089967	-27.38
Yttrium	A	4781284	3881022	-18.83

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551146 File : f0910146 Time : 10-JUN-2008 17:11
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9402, S9405

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4098	0.2962	10000	9585	ug/L	-4	10	
Antimony	A	0.2567	0.1679	100.0	100.6	ug/L	1	10	
Barium	A	0.0700	0.0511	100.0	97.76	ug/L	-2	10	
Beryllium	A	0.1638	0.1380	100.0	102.3	ug/L	2	10	
Cadmium	A	0.0573	0.0446	100.0	95.89	ug/L	-4	10	
Calcium	A	0.0221	0.0118	10000	10000	ug/L	0	10	
Lead	A	0.4529	0.3085	100.0	96.20	ug/L	-4	10	
Magnesium	A	0.3300	0.2401	10000	9566	ug/L	-4	10	
Molybdenum	A	0.1492	0.1160	100.0	98.12	ug/L	-2	10	
Potassium	A	1.3573	0.3730	10000	9926	ug/L	-1	10	
Silver	A	0.4072	0.2070	100.0	102.7	ug/L	3	10	
Thallium	A	0.5818	0.4427	50.00	47.01	ug/L	-6	10	
Arsenic	E	0.4214	0.3361	100.0	98.26	ug/L	-2	10	
Chromium	E	4.5530	2.8749	100.0	98.20	ug/L	-2	10	
Cobalt	E	6.5886	5.3182	100.0	101.2	ug/L	1	10	
Copper	E	9.9448	5.0283	100.0	96.01	ug/L	-4	10	
Manganese	E	1.3415	0.9770	100.0	99.02	ug/L	-1	10	
Nickel	E	2.2005	1.5282	100.0	100.4	ug/L	0	10	
Sodium	E	0.9300	0.3128	10000	9338	ug/L	-7	10	
Vanadium	E	2.6638	2.0376	100.0	100.0	ug/L	0	10	
Zinc	E	3.3426	0.5636	100.0	94.24	ug/L	-6	10	
Iron	H	0.6443	0.4870	10000	10160	ug/L	2	10	
Selenium	H	0.0868	0.0711	100.0	100.9	ug/L	1	10	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	1821384	-16.91
Scandium	A	2975662	2755679	-7.39
Scandium	E	29938	24611	-17.79
Scandium	H	914259	764366	-16.40
Germanium	H	243670	206927	-15.08
Germanium	E	24961	21307	-14.64
Indium	A	4254937	3726262	-12.42
Bismuth	A	2768004	2307707	-16.63
Yttrium	A	4781284	4387312	-8.24
Terbium	A	5096586	4494869	-11.81

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551148 File : f0910148 Time : 10-JUN-2008 17:36
Cal : 898232551001 Caldate : 09-JUN-2008

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	1.482	ug/L	
Antimony	A	ND	0.1000	0.02880	ug/L	
Barium	A	ND	0.1000	0.02829	ug/L	
Beryllium	A	ND	0.1000	0.02131	ug/L	
Cadmium	A	ND	0.1000	0.01640	ug/L	
Calcium	A	ND	10.00	3.488	ug/L	
Lead	A	ND	0.1000	0.02921	ug/L	
Magnesium	A	ND	10.00	4.248	ug/L	
Molybdenum	A	ND	0.1000	0.07024	ug/L	
Potassium	A	ND	10.00	6.671	ug/L	
Silver	A	ND	0.1000	0.01096	ug/L	
Thallium	A	ND	0.05000	0.007767	ug/L	
Arsenic	E	ND	0.1000	0.04450	ug/L	
Chromium	E	ND	0.1000	0.04322	ug/L	
Cobalt	E	ND	0.1000	0.01314	ug/L	
Copper	E	ND	0.1000	0.07210	ug/L	
Manganese	E	ND	0.1000	0.03907	ug/L	
Nickel	E	ND	0.1000	0.06568	ug/L	
Sodium	E	ND	10.00	8.044	ug/L	
Vanadium	E	ND	0.1000	0.02786	ug/L	
Zinc	E	0.4340	0.1000	0.6420	ug/L	ib ***
Iron	H	ND	10.00	4.521	ug/L	
Selenium	H	ND	0.1000	0.02970	ug/L	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	1890164	-13.78
Scandium	A	2975662	2795809	-6.04
Scandium	E	29938	25069	-16.26
Scandium	H	914259	779465	-14.74
Germanium	H	243670	213868	-12.23
Germanium	E	24961	21791	-12.70
Indium	A	4254937	3879440	-8.82
Bismuth	A	2768004	2469907	-10.77
Yttrium	A	4781284	4453570	-6.85
Terbium	A	5096586	4574314	-10.25

ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551154 File : f0910154 Time : 10-JUN-2008 18:49
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9402, S9405

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4098	0.2940	10000	9511	ug/L	-5	10	
Antimony	A	0.2567	0.1660	100.0	99.39	ug/L	-1	10	
Barium	A	0.0700	0.0512	100.0	97.83	ug/L	-2	10	
Beryllium	A	0.1638	0.1378	100.0	102.1	ug/L	2	10	
Cadmium	A	0.0573	0.0442	100.0	95.07	ug/L	-5	10	
Calcium	A	0.0221	0.0117	10000	9877	ug/L	-1	10	
Lead	A	0.4529	0.3061	100.0	95.47	ug/L	-5	10	
Magnesium	A	0.3300	0.2386	10000	9507	ug/L	-5	10	
Molybdenum	A	0.1492	0.1148	100.0	97.16	ug/L	-3	10	
Potassium	A	1.3573	0.3715	10000	9884	ug/L	-1	10	
Silver	A	0.4072	0.2048	100.0	101.6	ug/L	2	10	
Thallium	A	0.5818	0.4402	50.00	46.75	ug/L	-7	10	
Arsenic	E	0.4214	0.3351	100.0	97.98	ug/L	-2	10	
Chromium	E	4.5530	2.8582	100.0	97.62	ug/L	-2	10	
Cobalt	E	6.5886	5.2763	100.0	100.4	ug/L	0	10	
Copper	E	9.9448	5.0142	100.0	95.74	ug/L	-4	10	
Manganese	E	1.3415	0.9760	100.0	98.92	ug/L	-1	10	
Nickel	E	2.2005	1.5160	100.0	99.57	ug/L	0	10	
Sodium	E	0.9300	0.3131	10000	9348	ug/L	-7	10	
Vanadium	E	2.6638	2.0293	100.0	99.63	ug/L	0	10	
Zinc	E	3.3426	0.5633	100.0	94.19	ug/L	-6	10	
Iron	H	0.6443	0.4791	10000	9991	ug/L	0	10	
Selenium	H	0.0868	0.0708	100.0	100.4	ug/L	0	10	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	1861923	-15.06
Scandium	A	2975662	2856034	-4.02
Scandium	E	29938	25203	-15.82
Indium	H	914259	772484	-15.51
Germanium	H	243670	208640	-14.38
Germanium	E	24961	21664	-13.21
Indium	A	4254937	3831245	-9.96
Bismuth	A	2768004	2343738	-15.33
Yttrium	A	4781284	4511777	-5.64
Terbium	A	5096586	4572403	-10.28

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551156 File : f0910156 Time : 10-JUN-2008 19:14
Cal : 898232551001 Caldate : 09-JUN-2008

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	1.482	ug/L	
Antimony	A	ND	0.1000	0.02880	ug/L	
Barium	A	ND	0.1000	0.02829	ug/L	
Beryllium	A	ND	0.1000	0.02131	ug/L	
Cadmium	A	ND	0.1000	0.01640	ug/L	
Calcium	A	ND	10.00	3.488	ug/L	
Lead	A	ND	0.1000	0.02921	ug/L	
Magnesium	A	ND	10.00	4.248	ug/L	
Molybdenum	A	ND	0.1000	0.07024	ug/L	
Potassium	A	ND	10.00	6.671	ug/L	
Silver	A	ND	0.1000	0.01096	ug/L	
Thallium	A	ND	0.05000	0.007767	ug/L	
Arsenic	E	ND	0.1000	0.04450	ug/L	
Chromium	E	ND	0.1000	0.04322	ug/L	
Cobalt	E	ND	0.1000	0.01314	ug/L	
Copper	E	0.1253	0.1000	0.07210	ug/L	ib ***
Manganese	E	ND	0.1000	0.03907	ug/L	
Nickel	E	ND	0.1000	0.06568	ug/L	
Sodium	E	ND	10.00	8.044	ug/L	
Vanadium	E	ND	0.1000	0.02786	ug/L	
Zinc	E	0.4954	0.1000	0.6420	ug/L	ib ***
Iron	H	ND	10.00	4.521	ug/L	
Selenium	H	ND	0.1000	0.02970	ug/L	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	1915549	-12.62
Scandium	A	2975662	2850868	-4.19
Scandium	E	29938	25527	-14.73
Scandium	H	914259	790637	-13.52
Germanium	H	243670	217316	-10.82
Germanium	E	24961	22177	-11.15
Indium	A	4254937	3948937	-7.19
Bismuth	A	2768004	2429558	-12.23
Yttrium	A	4781284	4483074	-6.24
Terbium	A	5096586	4573751	-10.26

ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551157 File : f0910157 Time : 10-JUN-2008 19:27
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9403, S9405

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.1842	0.1000	ug/L	!a+
Barium	A	4.800	0.1000	ug/L	!a+
Beryllium	A	[0.02670]	0.1000	ug/L	!a+
Cadmium	A	1.621	0.1000	ug/L	!a+
Lead	A	0.6850	0.1000	ug/L	!a+
Silver	A	0.4532	0.1000	ug/L	!a+
Thallium	A	[0.04910]	0.05000	ug/L	!a+
Arsenic	E	0.2840	0.1000	ug/L	!a+
Chromium	E	2.137	0.1000	ug/L	!a+
Cobalt	E	0.2429	0.1000	ug/L	!a+
Copper	E	2.317	0.1000	ug/L	!a+
Manganese	E	0.8500	0.1000	ug/L	!a+
Nickel	E	1.557	0.1000	ug/L	!a+
Vanadium	E	0.1198	0.1000	ug/L	!a+
Zinc	E	7.446	0.1000	ug/L	!a+
Selenium	H	[0.06670]	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93820	ug/L	94
Calcium	A	300000	294900	ug/L	98
Magnesium	A	100000	89990	ug/L	90
Molybdenum	A	2000	1911	ug/L	96
Potassium	A	100000	97970	ug/L	98
Sodium	E	250000	222100	ug/L	89
Iron	H	250000	239100	ug/L	96

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2192151	1484026	-32.30
Scandium	A	2975662	2526608	-15.09
Indium	E	29938	23676	-20.92
Scandium	H	914259	670169	-26.70
Germanium	H	243670	172449	-29.23
Germanium	E	24961	18972	-23.99
Indium	A	4254937	3135996	-26.30
Bismuth	A	2768004	1836250	-33.66
Yttrium	A	4781284	3966498	-17.04
Terbium	A	5096586	3929094	-22.91

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 898232551160 File : f0910160 Time : 10-JUN-2008 19:58
Cal : 898232551001 Caldate : 09-JUN-2008
Standards: S9404, S9405

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	89500	ug/L	-11		
Cadmium	A	100.0	89.05	ug/L	-11	20	
Calcium	A	300000	282500	ug/L	-6		
Magnesium	A	100000	85790	ug/L	-14		
Molybdenum	A	2000	1859	ug/L	-7		
Potassium	A	100000	93500	ug/L	-7		
Silver	A	50.00	45.93	ug/L	-8	20	
Arsenic	E	100.0	96.41	ug/L	-4	20	
Chromium	E	200.0	185.6	ug/L	-7	20	
Cobalt	E	200.0	178.2	ug/L	-11	20	
Copper	E	200.0	169.0	ug/L	-16	20	
Manganese	E	200.0	186.2	ug/L	-7	20	
Nickel	E	200.0	170.9	ug/L	-15	20	
Sodium	E	250000	218800	ug/L	-12		
Vanadium	E	200.0	192.7	ug/L	-4	20	
Zinc	E	100.0	83.00	ug/L	-17	20	
Iron	H	250000	232600	ug/L	-7		
Selenium	H	100.0	93.08	ug/L	-7	20	

ISTD (ICALBLK f0910003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	914259	647583	-29.17
Scandium	A	2975662	2407457	-19.10
Scandium	E	29938	21888	-26.89
Germanium	H	243670	166477	-31.68
Germanium	E	24961	17671	-29.21
Indium	A	4254937	3048392	-28.36
Yttrium	A	4781284	3788500	-20.76

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 848234120 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 10-JUN-2008
Analytical Method: EPA 7470A SOP Version: HG_water_rv12
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
001	139101	X	STD01REP1				10-JUN-2008 14:00	1.0										
002	139101	ICAL	STD02REP1				10-JUN-2008 14:03	1.0	1.0									
003	139101	ICAL	STD03REP1				10-JUN-2008 14:05	1.0	1.0									
004	139101	ICAL	STD04REP1				10-JUN-2008 14:07	1.0	1.0									
005	139101	ICAL	STD05REP1				10-JUN-2008 14:09	1.0	1.0									
006	139101	ICAL	STD06REP1				10-JUN-2008 14:11	1.0	1.0									
007	139101	X	STD01REP1				10-JUN-2008 14:16	1.0										
008	139101	ICALBLK	STD01REP1				10-JUN-2008 14:19	1.0	1.0									
009	139101	ICV					10-JUN-2008 14:23	1.0	1.0	2	5.000	848234120001	4.980		ug/L	100		
010	139101	ICB					10-JUN-2008 14:26	1.0	1.0			848234120001	ND	0.20	ug/L			
011	139101	BLANK	QC445823		139101	Water	10-JUN-2008 14:28	1.0	1.0			848234120001	ND	0.20	ug/L			u
012	139101	BS	QC445824		139101	Water	10-JUN-2008 14:31	1.0	1.0		5.000	848234120001	4.200	0.20	ug/L	84		u
013	139101	BSD	QC445825		139101	Water	10-JUN-2008 14:33	1.0	1.0		5.000	848234120001	4.300	0.20	ug/L	86	2	u
014	139101	MSS	203760-002		139101	Filtra	10-JUN-2008 14:35	1.0	1.0			848234120001	ND	0.20	ug/L			u
015	139101	SER	QC445826	203760-002	139101	Filtra	10-JUN-2008 14:37	5.0	1.0			848234120001	ND	1.0	ug/L		--	u
016	139101	MS	QC445827	203760-002	139101	Filtra	10-JUN-2008 14:40	1.0	1.0		5.000	848234120001	4.510	0.20	ug/L	90		u
017	139101	MSD	QC445828	203760-002	139101	Filtra	10-JUN-2008 14:42	1.0	1.0		5.000	848234120001	4.380	0.20	ug/L	88	3	u
018	139101	MSS	203799-001		139101	Filtra	10-JUN-2008 14:44	1.0	1.0			848234120001	ND	0.20	ug/L			u
019	139101	SER	QC445829	203799-001	139101	Filtra	10-JUN-2008 14:46	5.0	1.0			848234120001	ND	1.0	ug/L		--	u
020	139101	MS	QC445830	203799-001	139101	Filtra	10-JUN-2008 14:49	1.0	1.0		5.000	848234120001	4.620	0.20	ug/L	92		u
021	139101	CCV					10-JUN-2008 14:51	1.0	1.0	3	2.500	848234120001	2.390		ug/L	96		
022	139101	CCB					10-JUN-2008 14:53	1.0	1.0			848234120001	ND	0.20	ug/L			
023	139101	MSD	QC445831	203799-001	139101	Filtra	10-JUN-2008 14:55	1.0	1.0		5.000	848234120001	4.280	0.20	ug/L	86	8	u
024	139101	MSS	203802-001		139101	Filtra	10-JUN-2008 14:58	1.0	1.0			848234120001	ND	0.20	ug/L			u
025	139101	SER	QC445832	203802-001	139101	Filtra	10-JUN-2008 15:00	5.0	1.0			848234120001	ND	1.0	ug/L		--	u
026	139101	MS	QC445833	203802-001	139101	Filtra	10-JUN-2008 15:02	1.0	1.0		5.000	848234120001	4.780	0.20	ug/L	96		u
027	139101	MSD	QC445834	203802-001	139101	Filtra	10-JUN-2008 15:05	1.0	1.0		5.000	848234120001	4.830	0.20	ug/L	97	1	u
028	139101	MSS	203836-002		139101	Filtra	10-JUN-2008 15:07	1.0	1.0			848234120001	ND	0.20	ug/L			u
029	139101	SER	QC445835	203836-002	139101	Filtra	10-JUN-2008 15:09	5.0	1.0			848234120001	ND	1.0	ug/L		--	u
030	139101	MS	QC445836	203836-002	139101	Filtra	10-JUN-2008 15:11	1.0	1.0		5.000	848234120001	4.460	0.20	ug/L	89		u
031	139101	MSD	QC445837	203836-002	139101	Filtra	10-JUN-2008 15:13	1.0	1.0		5.000	848234120001	4.510	0.20	ug/L	90	1	u
032	139101	SAMPLE	203760-003		139101	Filtra	10-JUN-2008 15:15	1.0	1.0			848234120001	ND	0.20	ug/L			u
033	139101	CCV					10-JUN-2008 15:18	1.0	1.0	4	5.000	848234120001	4.520		ug/L	90		
034	139101	CCB					10-JUN-2008 15:20	1.0	1.0			848234120001	[0.02100]	0.20	ug/L			
035	139101	X	203760-004		139101	Filtra	10-JUN-2008 15:22	1.0										
036	139101	X	203799-002		139101	Filtra	10-JUN-2008 15:24	1.0										
037	139101	X	203799-003		139101	Filtra	10-JUN-2008 15:27	1.0										
038	139101	X	203802-002		139101	Filtra	10-JUN-2008 15:29	1.0										
039	139101	X	203812-001		139101	Water	10-JUN-2008 15:31	1.0										
040	139101	X	203835-001		139101	Water	10-JUN-2008 15:33	1.0										
041	139101	X	203836-003		139101	Filtra	10-JUN-2008 15:35	1.0										
042	139101	X	203836-005		139101	Filtra	10-JUN-2008 15:37	1.0										
043	139101	X	203836-006		139101	Filtra	10-JUN-2008 15:40	1.0										

Stds used: 1=S9447 2=S9449 3=S9450 4=S9451 5=S9452
Flags used: u=use

Analyst: _____ Date: 6/11/08

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 848234120 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 10-JUN-2008
Analytical Method: EPA 7470A SOP Version: HG_water_rv12
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
044	139101	X	203836-007		139101	Filtra	10-JUN-2008 15:42	1.0										
045	139101	X					10-JUN-2008 15:44	1.0										
046	139101	X					10-JUN-2008 15:54	1.0										
047	139101	CCV					10-JUN-2008 15:59	1.0	1.0	4	5.000	848234120001	5.620		ug/L	112		
048	139101	CCB					10-JUN-2008 16:01	1.0	1.0			848234120001	ND	0.20	ug/L			
049	139101	SAMPLE	203760-004		139101	Filtra	10-JUN-2008 16:04	1.0	1.0			848234120001	0.052 J	0.20	ug/L			u
050	139101	SAMPLE	203799-002		139101	Filtra	10-JUN-2008 16:06	1.0	1.0			848234120001	ND	0.20	ug/L			u
051	139101	SAMPLE	203799-003		139101	Filtra	10-JUN-2008 16:08	1.0	1.0			848234120001	0.23	0.20	ug/L			u
052	139101	SAMPLE	203802-002		139101	Filtra	10-JUN-2008 16:10	1.0	1.0			848234120001	ND	0.20	ug/L			u
053	139101	CCV					10-JUN-2008 16:13	1.0	1.0	3	2.500	848234120001	2.890		ug/L	116		
054	139101	CCB					10-JUN-2008 16:15	1.0	1.0			848234120001	[0.01200]	0.20	ug/L			
055	139101	SAMPLE	203812-001		139101	Water	10-JUN-2008 16:17	1.0	1.0			848234120001	2.4	0.20	ug/L			u
056	139101	CCV					10-JUN-2008 16:19	1.0	1.0	5	7.500	848234120001	8.400		ug/L	112		
057	139101	CCB					10-JUN-2008 16:21	1.0	1.0			848234120001	ND	0.20	ug/L			
058	139101	SAMPLE	203835-001		139101	Water	10-JUN-2008 16:24	1.0	1.0			848234120001	ND	0.20	ug/L			u
059	139101	SAMPLE	203836-003		139101	Filtra	10-JUN-2008 16:26	1.0	1.0			848234120001	ND	0.20	ug/L			u
060	139101	SAMPLE	203836-005		139101	Filtra	10-JUN-2008 16:28	1.0	1.0			848234120001	ND	0.20	ug/L			u
061	139101	SAMPLE	203836-006		139101	Filtra	10-JUN-2008 16:30	1.0	1.0			848234120001	ND	0.20	ug/L			u
062	139101	SAMPLE	203836-007		139101	Filtra	10-JUN-2008 16:34	1.0	1.0			848234120001	ND	0.20	ug/L			u
063	139101	CCV					10-JUN-2008 16:36	1.0	1.0	5	7.500	848234120001	8.630		ug/L	115		
064	139101	CCB					10-JUN-2008 16:38	1.0	1.0			848234120001	ND	0.20	ug/L			
065	139101	SAMPLE	203838-001		139101	Filtra	10-JUN-2008 16:40	1.0	1.0			848234120001	ND	0.20	ug/L			u
066	139101	SAMPLE	203838-002		139101	Filtra	10-JUN-2008 16:43	1.0	1.0			848234120001	ND	0.20	ug/L			u
067	139101	SAMPLE	203838-003		139101	Filtra	10-JUN-2008 16:45	1.0	1.0			848234120001	ND	0.20	ug/L			u
068	139101	SAMPLE	203838-004		139101	Filtra	10-JUN-2008 16:47	1.0	1.0			848234120001	ND	0.20	ug/L			u
069	139101	CCV					10-JUN-2008 16:49	1.0	1.0	4	5.000	848234120001	5.720		ug/L	114		
070	139101	CCB					10-JUN-2008 16:51	1.0	1.0			848234120001	ND	0.20	ug/L			

Stds used: 1=S9447 2=S9449 3=S9450 4=S9451 5=S9452
Flags used: u=use

Analyst: Date: 6/11/08

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Inst : MET14
Calnum : 848234120001
Units : ug/L

Date : 10-JUN-2008 14:03
X Axis : R

Reviewer : ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	139101	848234120002	STD02REP1	10-JUN-2008 14:03	S9447 (500X)
L2	139101	848234120003	STD03REP1	10-JUN-2008 14:05	S9447 (200X)
L3	139101	848234120004	STD04REP1	10-JUN-2008 14:07	S9447 (50X)
L4	139101	848234120005	STD05REP1	10-JUN-2008 14:09	S9447 (20X)
L5	139101	848234120006	STD06REP1	10-JUN-2008 14:11	S9447 (10X)

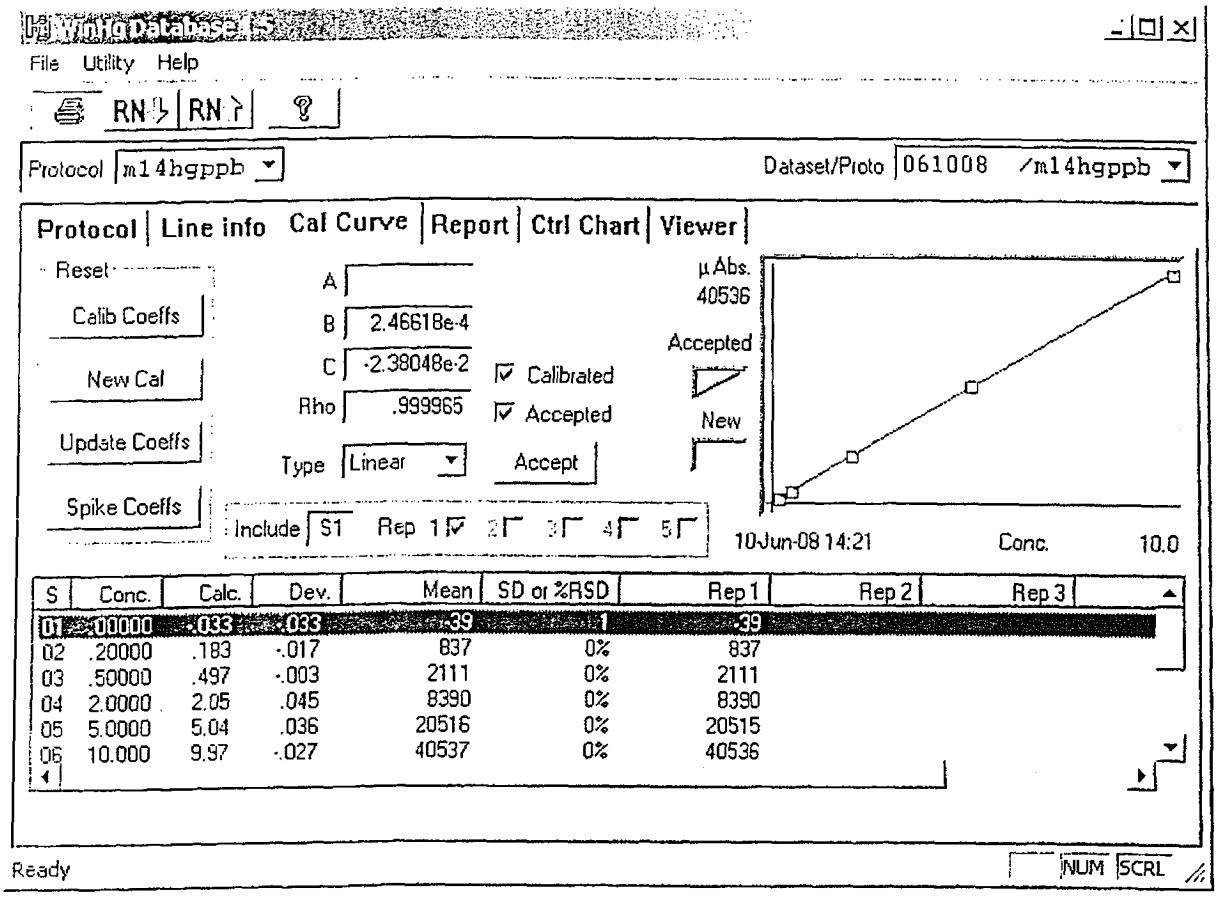
Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	4185.0	4222.0	4195.0	4103.0	4053.6	LINR	-0.0238	2.47E-4		4151.7	1.000	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.200	-9	0.500	-1	2.000	2	5.000	1	10.00	0

123

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

848234120001


File Utility Help
RN RN
Protocol m14hgppb
Dataset/Proto 061008 /m14hgppb
Protocol Line info Cal Curve Report Ctrl Chart Viewer
Reset
Calib Coeffs
New Cal
Update Coeffs
Spike Coeffs
A
B 2.46618e-4
C -2.38048e-2
Rho .999965
Type Linear
Calibrated
Accepted
Accept
µAbs.
40536
Accepted
New
Include S1 Rep 1 2 3 4 5
10-Jun-08 14:21
Conc. 10.0
S Conc. Calc. Dev. Mean SD or %RSD Rep 1 Rep 2 Rep 3
01 .00000 -.033 .033 -39 1 -39
02 .20000 .183 -.017 837 0% 837
03 .50000 .497 -.003 2111 0% 2111
04 2.0000 2.05 .045 8390 0% 8390
05 5.0000 5.04 .036 20516 0% 20515
06 10.000 9.97 -.027 40537 0% 40536
Ready
NUM SCRL

15:57:47 28 May 2008

Folder: 061008
Protocol: m14hgppb
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 JM 6/11/08 Seq: 1 14:00:52 10 Jun 08 HG

Hg .000 ppb 659
Bkgd 1 15742193

*** Standard: 2 Rep: 1 Seq: 2 14:03:10 10 Jun 08 HG

Hg .200 ppb 837
Bkgd 1 15741171

*** Standard: 3 Rep: 1 Seq: 3 14:05:17 10 Jun 08 HG

Hg .500 ppb 2111
Bkgd 1 15737102

*** Standard: 4 Rep: 1 Seq: 4 14:07:22 10 Jun 08 HG

Hg 2.00 ppb 8390
Bkgd 1 15734579

*** Standard: 5 Rep: 1 Seq: 5 14:09:29 10 Jun 08 HG

Hg 5.00 ppb 20515
Bkgd 1 15728561

*** Standard: 6 Rep: 1 Seq: 6 14:11:46 10 Jun 08 HG

Hg 10.0 ppb 40536
Bkgd 1 15725590

*** Standard: 1 Rep: 1 Seq: 7 14:16:09 10 Jun 08 HG

Hg .000 ppb 727 JM 6/11/08
Bkgd 1 15720004

*** Standard: 1 Rep: 1 Seq: 8 14:19:17 10 Jun 08 HG

Hg .000 ppb -39
Bkgd 1 15718189

*** Check Standard: 2 Ck2s9449 Seq: 9 14:23:22 10 Jun 08 HG

Line	Flag		Intensities
Hg			20276
		Bkgd 1	15712725

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 848234120 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 10-JUN-2008
Analytical Method: EPA 7470A SOP Version: HG_water_rv12
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
001	139101	X	STD01REP1				10-JUN-2008 14:00	1.0										
002	139101	ICAL	STD02REP1				10-JUN-2008 14:03	1.0	1.0									
003	139101	ICAL	STD03REP1				10-JUN-2008 14:05	1.0	1.0									
004	139101	ICAL	STD04REP1				10-JUN-2008 14:07	1.0	1.0									
005	139101	ICAL	STD05REP1				10-JUN-2008 14:09	1.0	1.0									
006	139101	ICAL	STD06REP1				10-JUN-2008 14:11	1.0	1.0									
007	139101	X	STD01REP1				10-JUN-2008 14:16	1.0										
008	139101	ICALBLK	STD01REP1				10-JUN-2008 14:19	1.0	1.0									
009	139101	ICV					10-JUN-2008 14:23	1.0	1.0	2	5.000	848234120001	4.980		ug/L	100		
010	139101	ICB					10-JUN-2008 14:26	1.0	1.0			848234120001	ND	0.20	ug/L			
011	139101	BLANK	QC445823		139101	Water	10-JUN-2008 14:28	1.0	1.0			848234120001	ND	0.20	ug/L			u
012	139101	BS	QC445824		139101	Water	10-JUN-2008 14:31	1.0	1.0		5.000	848234120001	4.200	0.20	ug/L	84		u
013	139101	BSD	QC445825		139101	Water	10-JUN-2008 14:33	1.0	1.0		5.000	848234120001	4.300	0.20	ug/L	86	2	u
014	139101	MSS	203760-002		139101	Filtra	10-JUN-2008 14:35	1.0	1.0			848234120001	ND	0.20	ug/L			u
015	139101	SER	QC445826	203760-002	139101	Filtra	10-JUN-2008 14:37	5.0	1.0			848234120001	ND	1.0	ug/L		--	u
016	139101	MS	QC445827	203760-002	139101	Filtra	10-JUN-2008 14:40	1.0	1.0		5.000	848234120001	4.510	0.20	ug/L	90		u
017	139101	MSD	QC445828	203760-002	139101	Filtra	10-JUN-2008 14:42	1.0	1.0		5.000	848234120001	4.380	0.20	ug/L	88	3	u
018	139101	MSS	203799-001		139101	Filtra	10-JUN-2008 14:44	1.0	1.0			848234120001	ND	0.20	ug/L			u
019	139101	SER	QC445829	203799-001	139101	Filtra	10-JUN-2008 14:46	5.0	1.0			848234120001	ND	1.0	ug/L		--	u
020	139101	MS	QC445830	203799-001	139101	Filtra	10-JUN-2008 14:49	1.0	1.0		5.000	848234120001	4.620	0.20	ug/L	92		u
021	139101	CCV					10-JUN-2008 14:51	1.0	1.0	3	2.500	848234120001	2.390		ug/L	96		
022	139101	CCB					10-JUN-2008 14:53	1.0	1.0			848234120001	ND	0.20	ug/L			
023	139101	MSD	QC445831	203799-001	139101	Filtra	10-JUN-2008 14:55	1.0	1.0		5.000	848234120001	4.280	0.20	ug/L	86	8	u
024	139101	MSS	203802-001		139101	Filtra	10-JUN-2008 14:58	1.0	1.0			848234120001	ND	0.20	ug/L			u
025	139101	SER	QC445832	203802-001	139101	Filtra	10-JUN-2008 15:00	5.0	1.0			848234120001	ND	1.0	ug/L		--	u
026	139101	MS	QC445833	203802-001	139101	Filtra	10-JUN-2008 15:02	1.0	1.0		5.000	848234120001	4.780	0.20	ug/L	96		u
027	139101	MSD	QC445834	203802-001	139101	Filtra	10-JUN-2008 15:05	1.0	1.0		5.000	848234120001	4.830	0.20	ug/L	97	1	u
028	139101	MSS	203836-002		139101	Filtra	10-JUN-2008 15:07	1.0	1.0			848234120001	ND	0.20	ug/L			u
029	139101	SER	QC445835	203836-002	139101	Filtra	10-JUN-2008 15:09	5.0	1.0			848234120001	ND	1.0	ug/L		--	u
030	139101	MS	QC445836	203836-002	139101	Filtra	10-JUN-2008 15:11	1.0	1.0		5.000	848234120001	4.460	0.20	ug/L	89		u
031	139101	MSD	QC445837	203836-002	139101	Filtra	10-JUN-2008 15:13	1.0	1.0		5.000	848234120001	4.510	0.20	ug/L	90	1	u
032	139101	SAMPLE	203760-003		139101	Filtra	10-JUN-2008 15:15	1.0	1.0			848234120001	ND	0.20	ug/L			u
033	139101	CCV					10-JUN-2008 15:18	1.0	1.0	4	5.000	848234120001	4.520		ug/L	90		
034	139101	CCB					10-JUN-2008 15:20	1.0	1.0			848234120001	[0.02100]	0.20	ug/L			
035	139101	X	203760-004		139101	Filtra	10-JUN-2008 15:22	1.0										
036	139101	X	203799-002		139101	Filtra	10-JUN-2008 15:24	1.0										
037	139101	X	203799-003		139101	Filtra	10-JUN-2008 15:27	1.0										
038	139101	X	203802-002		139101	Filtra	10-JUN-2008 15:29	1.0										
039	139101	X	203812-001		139101	Water	10-JUN-2008 15:31	1.0										
040	139101	X	203835-001		139101	Water	10-JUN-2008 15:33	1.0										
041	139101	X	203836-003		139101	Filtra	10-JUN-2008 15:35	1.0										
042	139101	X	203836-005		139101	Filtra	10-JUN-2008 15:37	1.0										
043	139101	X	203836-006		139101	Filtra	10-JUN-2008 15:40	1.0										

Stds used: 1=S9447 2=S9449 3=S9450 4=S9451 5=S9452
Flags used: u=use

Analyst: [signature] Date: 6/11/08

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 848234120 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 10-JUN-2008
Analytical Method: EPA 7470A SOP Version: HG_water_rv12
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
044	139101	X	203836-007		139101	Filtra	10-JUN-2008 15:42	1.0										
045	139101	X					10-JUN-2008 15:44	1.0										
046	139101	X					10-JUN-2008 15:54	1.0										
047	139101	CCV					10-JUN-2008 15:59	1.0	1.0	4	5.000	848234120001	5.620		ug/L	112		
048	139101	CCB					10-JUN-2008 16:01	1.0	1.0			848234120001	ND	0.20	ug/L			
049	139101	SAMPLE	203760-004		139101	Filtra	10-JUN-2008 16:04	1.0	1.0			848234120001	0.052 J	0.20	ug/L			u
050	139101	SAMPLE	203799-002		139101	Filtra	10-JUN-2008 16:06	1.0	1.0			848234120001	ND	0.20	ug/L			u
051	139101	SAMPLE	203799-003		139101	Filtra	10-JUN-2008 16:08	1.0	1.0			848234120001	0.23	0.20	ug/L			u
052	139101	SAMPLE	203802-002		139101	Filtra	10-JUN-2008 16:10	1.0	1.0			848234120001	ND	0.20	ug/L			u
053	139101	CCV					10-JUN-2008 16:13	1.0	1.0	3	2.500	848234120001	2.890		ug/L	116		
054	139101	CCB					10-JUN-2008 16:15	1.0	1.0			848234120001	[0.01200]	0.20	ug/L			
055	139101	SAMPLE	203812-001		139101	Water	10-JUN-2008 16:17	1.0	1.0			848234120001	2.4	0.20	ug/L			u
056	139101	CCV					10-JUN-2008 16:19	1.0	1.0	5	7.500	848234120001	8.400		ug/L	112		
057	139101	CCB					10-JUN-2008 16:21	1.0	1.0			848234120001	ND	0.20	ug/L			
058	139101	SAMPLE	203835-001		139101	Water	10-JUN-2008 16:24	1.0	1.0			848234120001	ND	0.20	ug/L			u
059	139101	SAMPLE	203836-003		139101	Filtra	10-JUN-2008 16:26	1.0	1.0			848234120001	ND	0.20	ug/L			u
060	139101	SAMPLE	203836-005		139101	Filtra	10-JUN-2008 16:28	1.0	1.0			848234120001	ND	0.20	ug/L			u
061	139101	SAMPLE	203836-006		139101	Filtra	10-JUN-2008 16:30	1.0	1.0			848234120001	ND	0.20	ug/L			u
062	139101	SAMPLE	203836-007		139101	Filtra	10-JUN-2008 16:34	1.0	1.0			848234120001	ND	0.20	ug/L			u
063	139101	CCV					10-JUN-2008 16:36	1.0	1.0	5	7.500	848234120001	8.630		ug/L	115		
064	139101	CCB					10-JUN-2008 16:38	1.0	1.0			848234120001	ND	0.20	ug/L			
065	139101	SAMPLE	203838-001		139101	Filtra	10-JUN-2008 16:40	1.0	1.0			848234120001	ND	0.20	ug/L			u
066	139101	SAMPLE	203838-002		139101	Filtra	10-JUN-2008 16:43	1.0	1.0			848234120001	ND	0.20	ug/L			u
067	139101	SAMPLE	203838-003		139101	Filtra	10-JUN-2008 16:45	1.0	1.0			848234120001	ND	0.20	ug/L			u
068	139101	SAMPLE	203838-004		139101	Filtra	10-JUN-2008 16:47	1.0	1.0			848234120001	ND	0.20	ug/L			u
069	139101	CCV					10-JUN-2008 16:49	1.0	1.0	4	5.000	848234120001	5.720		ug/L	114		
070	139101	CCB					10-JUN-2008 16:51	1.0	1.0			848234120001	ND	0.20	ug/L			

Stds used: 1=S9447 2=S9449 3=S9450 4=S9451 5=S9452
Flags used: u=use

Analyst: _____ Date: 6/11/08

Curtis & Tompkins Laboratories Sample Preparation Summary 10-JUN-2008 11:11

Batch Number : 139052
Date Extracted: 09-JUN-2008 09:00
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S8777
Spike #2 ID : S8778
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
203763-005			Shaw E&I	Filtrate	50	mL	50	1.000000	1					FE, MN		
203763-005			Shaw E&I	Water	50	mL	50	1.000000	1					FE, MN		
203763-006			Shaw E&I	Filtrate	50	mL	50	1.000000	1					FE, MN		
203763-006			Shaw E&I	Water	50	mL	50	1.000000	1					FE, MN		
203763-007			Shaw E&I	Filtrate	50	mL	50	1.000000	1					FE, MN		
203763-007			Shaw E&I	Water	50	mL	50	1.000000	1					FE, MN		
203763-008			Shaw E&I	Filtrate	50	mL	50	1.000000	1					FE, MN		
203763-008			Shaw E&I	Water	50	mL	50	1.000000	1					FE, MN		
203764-001			Shaw E&I	Water	50	mL	50	1.000000	1					FE, MN		
203787-001			Geomatrix Consultants	Filtrate	50	mL	50	1.000000	1					AS, NI, SB		
203787-002			Geomatrix Consultants	Filtrate	50	mL	50	1.000000	1					AS, NI, SB		
203787-003			Geomatrix Consultants	Filtrate	50	mL	50	1.000000	1					AS, NI, SB		
203787-005			Geomatrix Consultants	Filtrate	50	mL	50	1.000000	1					AS, NI, SB		
203799-001			Arcadis	Filtrate	50	mL	50	1.000000	1					T26/ICP		
203799-002			Arcadis	Filtrate	50	mL	50	1.000000	1					T26/ICP		
203799-003			Arcadis	Filtrate	50	mL	50	1.000000	1					T26/ICP		
203802-001			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
203802-002			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
QC445591	BLANK			Water	50	mL	50	1.000000	1					ICAP		
QC445592	BS			Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC445593	BSD			Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC445594	MS	of 203763-006		Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC445595	MSD	of 203763-006		Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC445596	MS	of 203763-006		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC445597	MSD	of 203763-006		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC445598	SER	of 203763-006		Filtrate	50	mL	50	1.000000	1					ICAP		
QC445599	PDS	of 203763-006		Filtrate	50	mL	50	1.000000	1					ICAP		

Prep Chemist: [illegible] 6/10/08 Reviewed By: [illegible] Date: 6/10/08

Relinquished By: [illegible] 6/10/08 Received By: [illegible] Date: 6/10/08

Water Digestion for ICP-MS Curtis & Tompkins, Ltd.

LIMS Batch #: Kw 135052
Digested by: [illegible]
Date Digested: 6/9/08

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ EPA 3005A for ICP-MS
☐ _____

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Sample #	Sample #	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK		50	50	N	
BS					
BSD					
MS -06	C				
MSD-06					
305763-06					
05	G				
07					
08					
764-01	D				
767-01					FIELD FILTERED
02					
03					
05					
799-01	A				
02					
03					
802-01					
08					
763-06	L				
05	I				
07					
08					
MS -04	L				
MSD-04	L				

	Reagent ID or LIMS #	Initials / Date
Digestion tubes, lot #	J165005 Jel	
.5 mL of spike solution (Std1) was added to all spikes	58777	KKA 6/9
.5 mL of spike solution (Std2) was added to all spikes	38728	
digestion temperature (90-95 degrees C)	95	
digestion begun at (time)	9:00	
concentrated HCl	G13040	
concentrated HNO3	G070577	
digestion ended at (time)	13:15	
☐ filtered thru' Whatman # 541	N/A	
Relinquished to ICP group		

Prep Chemist / Date 6/9/08

Continued from page _____
Continued on page _____

6/9/08
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Preparation Summary 10-JUN-2008 11:51

Batch Number : 139101
Date Extracted: 10-JUN-2008
Extracted by : Jon Marshall
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S9447
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH D.F.	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
203760-002		Weston Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		MSS
203760-003		Weston Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
203760-004		Weston Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
203799-001		Arcadis	Filtrate	50	mL	50	1.000000	1				T26/HG		MSS
203799-002		Arcadis	Filtrate	50	mL	50	1.000000	1				T26/HG		
203799-003		Arcadis	Filtrate	50	mL	50	1.000000	1				T26/HG		
203802-001		Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		MSS
203802-002		Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
203812-001		Brenntag	Water	50	mL	50	1.000000	1				HG		
203835-001		New Logic Research	Water	50	mL	50	1.000000	1				HG		
203836-002		Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		MSS
203836-003		Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
203836-005		Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
203836-006		Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
203836-007		Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
203838-001		Tetra Tech EMI	Filtrate	50	mL	50	1.000000	1				T26/HG		
203838-002		Tetra Tech EMI	Filtrate	50	mL	50	1.000000	1				T26/HG		
203838-003		Tetra Tech EMI	Filtrate	50	mL	50	1.000000	1				T26/HG		
203838-004		Tetra Tech EMI	Filtrate	50	mL	50	1.000000	1				T26/HG		
QC445823	BLANK		Water	50	mL	50	1.000000	1				HG		
QC445824	BS		Water	50	mL	50	1.000000	1	2.5			HG		
QC445825	BSD		Water	50	mL	50	1.000000	1	2.5			HG		
QC445826	SER	of 203760-002	Filtrate	50	mL	50	1.000000	1				HG		
QC445827	MS	of 203760-002	Filtrate	50	mL	50	1.000000	1	2.5			HG		
QC445828	MSD	of 203760-002	Filtrate	50	mL	50	1.000000	1	2.5			HG		
QC445829	SER	of 203799-001	Filtrate	50	mL	50	1.000000	1				HG		
QC445830	MS	of 203799-001	Filtrate	50	mL	50	1.000000	1	2.5			HG		
QC445831	MSD	of 203799-001	Filtrate	50	mL	50	1.000000	1	2.5			HG		
QC445832	SER	of 203802-001	Filtrate	50	mL	50	1.000000	1				HG		
QC445833	MS	of 203802-001	Filtrate	50	mL	50	1.000000	1	2.5			HG		
QC445834	MSD	of 203802-001	Filtrate	50	mL	50	1.000000	1	2.5			HG		
QC445835	SER	of 203836-002	Filtrate	50	mL	50	1.000000	1				HG		
QC445836	MS	of 203836-002	Filtrate	50	mL	50	1.000000	1	2.5			HG		
QC445837	MSD	of 203836-002	Filtrate	50	mL	50	1.000000	1	2.5			HG		

Prep Chemist: _____ Reviewed By: _____ Date: 6-11-08

Relinquished By: _____ Received By: _____ Date: 6/11/08

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 139101

Date Digested: 6/10/08

Digestion Method

☒ EPA 7470A/ EPA 245.1

☐ _____

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Sample #	container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
203760-002	G	50.0	50.0	N	filtrate MSS
03					
04					
203799-001	A				MSS
02					
03					
203802-001					MSS
02					
203812-001					H_2O
203835-001					
203836-002	K				filtrate MSS
03					
05					
06					
07					
203838-001					
02					
03					
04					
MB					
BS					
BSD					
MS					of 203760-002
MSD					
					SXM 6/10/08

	Reagent ID/ LIMS# / Time	Initials / Date
Digestion Tube Lot #	CV071202	
25 mL of spike solution was added to all spikes	S9447	SXM 6/10/08
ICAL Source LIMS S#		
ICV / CCV LIMS S#	S9449/S0151152	
Digestion of Samples & Standards: Digestion Temperature (degrees C)	~~11:30~~ 95°C	
Digestion Started at (time)	11:30 SXM 6/10/08	
concentrated H_2SO_4	JTB 905036	
concentrated HNO_3	JTB 607057	
5% $KMnO_4$	K060308	
5% $K_2S_2O_8$	K_2	
NaCl.hydroxylamine hydrochloride	H_4	
Stannous Chloride	$SnCl_2$ 060908	
Digestion Completed at (time)	13:38	
☐ filtered thru' 0.45 um syringe filter (lot #)	—	

6/10/08

Prep Chemist / Date

Continued from page —

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Reviewed by / Date

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 139101

Date Digested: 6/10/08

Digestion Method

☒ EPA 7470A/ EPA 245.1

☐ _____

BK 2722

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Sample #	container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
MS		50.0	50.0	N	of 203749-001
MSD		↓	↓	↓	↓
MS					802-001
MSD					↓
MS					836-002
MSD		↓	↓	↓	↓
					JXM 6/10/08

	Reagent ID/ LIMS# / Time	Initials / Date
Digestion Tube Lot #	CV071202	
25 mL of spike solution was added to all spikes	SG447	JXM 6/10/08
ICAL Source LIMS S#	↓	↓
ICV / CCV LIMS S#	SG449/50/51/52	
Digestion Temperature (degrees C)	95°C	
Digestion Started at (time)	11:30	
concentrated H_2SO_4	JTB 60903	
concentrated HNO_3	JTB 60707	
5% $KMnO_4$	K 060308	
5% $K_2S_2O_8$	K2	
NaCl.hydroxylamine hydrochloride	Ha	
Stannous Chloride	$SnCl_2$ 060408	
Digestion Completed at (time)	13:30	
☐ filtered thru' 0.45 um syringe filter (lot #)	—	

6/10/08

Prep Chemist / Date

Continued from page 26

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Reviewed by / Date

Innovative Technical Solutions, Inc.

Letter of Transmittal

To:	Ms. Frances Fadullon, RPM	**From:**	Ken Leonard
Company:	BRAC PMO WEST 1455 Frazee Road, Suite 900 San Diego, CA 92108-4310 (619) 532-0935	**Date:**	12/12/08
		Project #	07033.0015 DCN# ITSI-6403-0015-0028 DCN# ITSI-6403-0015-0030 DCN# ITSI-6403-0015-0031

☐ **For Review & Comment** ☐ **Approved As Submitted** ☐ **Resubmit _____ Copies for Approval**
☐ **For Approval** ☐ **Approved As Noted** ☐ **Return _____ Corrected Prints**
☒ **For Information** ☐ **Return for Corrections** ☐ **Other:**

No.	Copies	Date	Title
1	1	12/12/08	Alameda Basewide Summer Non-Routine Groundwater Sampling Event: AOC 23, CAA-6, and IR Site 32, November 2008, Alameda Point, Alameda, California

Please call me at (925)-946-3263 if you have any questions regarding this submittal. Thank you.

Ken Leonard