

ANALYTICAL RESULTS

REDUCED DELIVERABLES FORMAT

Work Order Number: 24L0602

Tadco Engineering

Project: 4511 Liberty Ave



Sudip Pradhan
Laboratory Director

All Results meet the requirements of the National Environmental Laboratory Accreditation Conference and/or
State specific certifications as applicable.

Report Date: Dec 18, 2024

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PEOPLE ADVANCING SCIENCE
Pace Analytical Services, LLC-Fairfield

Sample Summary

Work Order: 24L0602

Client: Tadco Engineering

Project: 4511 Liberty Ave

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FB	24L0602-01	Drinking Water	12/04/2024 10:00	12/05/2024 11:00
S1-1st	24L0602-02	Drinking Water	12/04/2024 10:00	12/05/2024 11:00
S2	24L0602-03	Drinking Water	12/04/2024 10:06	12/05/2024 11:00
S3-1st	24L0602-04	Drinking Water	12/04/2024 10:10	12/05/2024 11:00
S4	24L0602-05	Drinking Water	12/04/2024 10:17	12/05/2024 11:00

24L0602

Tadco Engineering
4511 Liberty Ave

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - (complete all relevant info.)

Company Name: TADCO ENGINEERING & ENVIRONMENTAL SVCS, LLC
Street Address: 1099 WALL STREET WEST, SUITE 275
LYNDHURST, NJ 07071

Customer Order #: J-031606
Project Name: 4511 Liberty Ave
Lead Contaminant Testing (if applicable)

Contact/Report To: SAFWAT TADROUS
Phone #: 201-222-5327
E-Mail: TADCO@TADCOSOLUTIONS.COM
Cc E-Mail: RUTH@TADCOSOLUTIONS.COM

INVOICED TO: RUTH TELLEZ
Product & model: RUTH@TADCOSOLUTIONS.COM

Purchase Order # (if applicable):
Quote #:

Time Zone Collection: 1 AM 1 PM 2 PM 3 PM 4 PM 5 PM 6 PM 7 PM 8 PM 9 PM 10 PM 11 PM

Test Date/Time: 12/4/24 10:00

Test Location: Reduced NDEP Deliverables

Test Results Requested: 1 Only

Notes: *Sample Code (insert in vials) does not include Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (PL), Soil/Sediment (SS), Surface Water (SW), Sediment (SED), Sludge (SL), Other (OIL), Leachate (LL), Effluent (EF), Other (OT)

Regulation Reference (DW, KCRS, etc.) as applicable:

Method (if applicable): 1 No 2 No

Field Phases (if applicable): 1 No 2 No

Analysis: 1 No 2 No

Product (PL), Soil/Sediment (SS), Surface Water (SW), Sediment (SED), Sludge (SL), Other (OIL), Leachate (LL), Effluent (EF), Other (OT): Standard TAF

Container Start Date: 12/4/24 10:00

Container End Date: 12/4/24 10:00

Container Type: DW

Container Volume: 10.00

Container Material: DW

Container Color: DW

Container Shape: DW

Container Size: DW

Container Weight: DW

Container Length: DW

Container Width: DW

Container Height: DW

Container Diameter: DW

Container Circumference: DW

Container Area: DW

Container Volume: DW

Container Weight: DW

Container Length: DW

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Container Circumference: DW

Container Area: DW

Container Volume: DW

Container Weight: DW

Container Length

Sample Condition Upon Receipt Form (SCUR)

24L0602



Affix Sample Label Here

Date and Initials of person:

Examining contents: 2

Label: 2

Deliver to location: _____

pH: 2

Thermometer Used: 71M22

Date: 12/5/22

Time: 1100

Initials: 2

State of Origin: NJ

Cooler #1 Temp. °C 0.3 (Visual) 22 (Correction Factor) 0.5 (Actual)

☐ Samples on ice, cooling process has begun

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace

☐ Other _____

Shipping Method: ☐ First Overnight ☐ Priority Overnight ☐ Standard Overnight ☐ Ground

☐ Other _____

Tracking # _____

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No

Seals intact: ☐ Yes ☐ No

Ice: Wet Blue Melted None

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None

☐ Other _____

Samples were collected by Pace employee

☐ Yes

☒ No

☐ N/A

Comments:

Chain of Custody Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody Filled Out	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Relinquished Signature on COC	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Sampler Name and Signature on COC	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Samples Arrived within Hold Time	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Rush TAT requested on COC	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient Volume	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct Containers Used	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Sample Labels match COC (sample IDs & date/time of collection)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing acid/base preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Preservation Information:
All Containers needing preservation are found to be in compliance with EPA recommendation:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Preservative: _____
Exceptions: Vials, Microbiology, O&G, Metals		Lot #/Trace #: _____
		Date: _____ Time: _____
		Initials: _____
Headspace in VOA Vials? (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Additional Login Comments:

Client notification/ Resolution

Person Contacted:

Date/Time: 226823

Comments/Resolution:

Pace Analytical Services, LLC-Fairfield
Methodology Summary

Extractable Petroleum Hydrocarbons:

Gas Chromatography/Flame Ionization Detector

New Jersey Department of Environmental Protection Site Remediation Program Extractable Petroleum Hydrocarbons Methodology (Version 3.0).

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8015D or NJDEP Office of Quality Assurance Quantitation of Semi-Volatile Petroleum Products in Water, Soil and Sediment OQA-QAM-025, Revision 6.

Metals:

Inductively-Coupled Plasma Atomic Emission Spectrometry or Inductively-Coupled Plasma Mass Spectroscopy

Wastewater and Groundwater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 200.7, Method 200.8.

Soil Samples: USEPA Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 6010D.

Mercury:

Cold Vapor Atomic Absorption Spectrometry

Wastewater and Groundwater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 245.1.

Soil Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 7471B.

Volatile Organic Compounds:

Purge and Trap Gas Chromatography/Mass Spectroscopy

Drinking Water Samples: USEPA Methods for the Determination of Organic Compounds in Drinking Water, Method 524.2.

Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 624.1.

Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update VI, Method 8260D.

Semi-Volatile Organic Compounds:

Gas Chromatography/Mass Spectroscopy

Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 625.1.

Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update VI, Method 8270E.

PFAS Compounds:

Liquid Chromatography/Tandem Mass Spectroscopy

Drinking Water Samples: USEPA Methods for the Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS), Method 537 (v1.1).

Pesticides:

Gas Chromatography/Electron Capture Detector

Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 608.3.

Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8081B.

Polychlorinated Biphenyls (PCBs):

Gas Chromatography/Electron Capture Detector

Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 608.3.

Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8082A.

General Chemistry Methods:

Various general chemistry methods are taken from "Standard Methods for the Examination of Water and Wastewater, 22nd Edition", .

Specific method citations can be found on the Analytical Results Summary page of this report listed under 'Method'.

** A complete list of Pace Fairfield's certified Methods are on the [Standards And Docs](#) page of the Results Retrieval System

Methodology Summary

Pace Analytical Services, LLC-Fairfield
Data Reporting Abbreviations and Qualifiers



Method Detection Limit (MDL):

The MDL is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results. The value is calculated following the guidelines defined in:

“Definition and Procedure for the Determination of the Method Detection Limit, Revision 2”
EPA 821-R-16-006, published December 2016.

Reporting Limit (RL):

The RL is the Concentration of the lowest calibration standard that was included in the initial calibration of the instrument. On analytical reports this value is corrected for percent moisture and any concentration or dilution factors.

Concentration (Conc.) / Result:

If the compound is detected, the measured concentration is reported. If this column is “ND”, or contains a ‘less than’ (<) symbol, the compound was not detected.

Tentatively Identified Compound (TIC):

A TIC is a non-targeted compound, not included in the calibration, identified by a mass spectral library search OR requested to be identified and reported by the client.

Abbreviations:

ND	Non-Detect
TNTC	Too Numerous To Count

Qualifiers:

U	Compound not detected
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**DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE
SUMMARY QUESTIONNAIRE**

Laboratory Name: Pace Analytical Services, LLC-Fairfield **Client:** Tadco Engineering

Project Location: 4511 Liberty Ave

Project Number: 24L0602

Laboratory Sample ID(s): 01-05

Sampling Date(s): December 4, 2024

List DKQP Methods Used: EPA 200.8

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified handling, preservation, and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1B	EPH Method: Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Were samples received at an appropriate temperature (4±2° C)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt? Were these reporting limits met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for Data of Known Quality.

A-5



Pace Analytical Services, LLC-Fairfield



QUALITY CONTROL
Conformance/Non-Conformance Summary

ANALYSIS: INORGANICS [200.8]

COMMENTS:

The matrix spike and matrix spike duplicate recovery for Copper was outside QC limits (low).

Reviewed By: _____ (TS) 12/18/2024
Sudip Pradhan - Laboratory Director Date

For any questions about your Quality Control, please call us at 973-227-0422



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Pace Analytical Services, LLC-Fairfield

Positive Results Only Summary

24L0602-02 (Drinking Water)

Sample Name: S1-1st

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Copper	0.0754		0.00220	0.00600	mg/L	1	12/16/24 19:08

24L0602-03 (Drinking Water)

Sample Name: S2

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Copper	0.0584		0.00220	0.00600	mg/L	1	12/16/24 16:57

24L0602-04 (Drinking Water)

Sample Name: S3-1st

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Copper	0.144		0.00220	0.00600	mg/L	1	12/16/24 19:21

24L0602-05 (Drinking Water)

Sample Name: S4

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Copper	0.161		0.00220	0.00600	mg/L	1	12/16/24 19:25

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, RL - Reporting limit
D1 - Sample was Decanted (Dissolved)



Pace Analytical Services, LLC-Fairfield

All Results Summary

Client: Tadco Engineering
Project: 4511 Liberty Ave

Work Order: 24L0602
Date to Lab: 12/5/2024 11:00:00AM

24L0602-01 (Drinking Water) Sample Name: **FB** Collected: **12/4/2024 10:00:00AM**

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Copper	ND	U	0.00220	0.00600	mg/L	1	12/16/24 19:04
Lead	ND	U	0.000492	0.00200	mg/L	1	12/16/24 19:04

24L0602-02 (Drinking Water) Sample Name: **S1-1st** Collected: **12/4/2024 10:00:00AM**

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Copper	0.0754		0.00220	0.00600	mg/L	1	12/16/24 19:08
Lead	ND	U	0.000492	0.00200	mg/L	1	12/16/24 19:08

24L0602-03 (Drinking Water) Sample Name: **S2** Collected: **12/4/2024 10:06:00AM**

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Copper	0.0584		0.00220	0.00600	mg/L	1	12/16/24 16:57
Lead	ND	U	0.000492	0.00200	mg/L	1	12/16/24 16:57

24L0602-04 (Drinking Water) Sample Name: **S3-1st** Collected: **12/4/2024 10:10:00AM**

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Copper	0.144		0.00220	0.00600	mg/L	1	12/16/24 19:21
Lead	ND	U	0.000492	0.00200	mg/L	1	12/16/24 19:21

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, RL - Reporting limit
D1 - Sample was Decanted (Dissolved)



Pace Analytical Services, LLC-Fairfield

All Results Summary

Client: Tadco Engineering
Project: 4511 Liberty Ave

Work Order: 24L0602
Date to Lab: 12/5/2024 11:00:00AM

24L0602-05 (Drinking Water)

Sample Name: S4

Collected: 12/4/2024 10:17:00AM

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Copper	0.161		0.00220	0.00600	mg/L	1	12/16/24 19:25
Lead	ND	U	0.000492	0.00200	mg/L	1	12/16/24 19:25



ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, RL - Reporting limit
D1 - Sample was Decanted (Dissolved)



METALS

Tadco Engineering
Work Order: 24L0602
Project: 4511 Liberty Ave



ANALYSIS DATA SHEET

Client: Tadco Engineering
Client Sample ID: Calibration Blank
Lab Sample ID: SBL0277-CCB6
Project: 4511 Liberty Ave
Work Order: 24L0602

Init/Final Vol:	N/A	Prep Date:	12/16/2024 5:18:50PM
Matrix:	Drinking Water	Prep Method:	

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch	
7440-50-8	Copper	12/16/2024 17:18	ND	ug/L	6.00	1	SG	SBL0277/SBL0277
7439-92-1	Lead	12/16/2024 17:18	ND	ug/L	2.00	1	SG	SBL0277/SBL0277

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-1

ANALYSIS DATA SHEET

Client: Tadco Engineering
Client Sample ID: Calibration Blank
Lab Sample ID: SBL0277-CCB7
Project: 4511 Liberty Ave
Work Order: 24L0602

Init/Final Vol: N/A
Matrix: Drinking Water

Prep Date: 12/16/2024 5:44:13PM
Prep Method:

Total Metals - Aqueous (EPA 200.8)



0.1.

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch	
7440-50-8	Copper	12/16/2024 17:44	ND	ug/L	6.00	1	SG	SBL0277/SBL0277
7439-92-1	Lead	12/16/2024 17:44	ND	ug/L	2.00	1	SG	SBL0277/SBL0277

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Tadco Engineering
Client Sample ID: Calibration Blank
Lab Sample ID: SBL0277-CCB8
Project: 4511 Liberty Ave
Work Order: 24L0602

Init/Final Vol:	N/A	Prep Date:	12/16/2024 6:30:34PM
Matrix:	Drinking Water	Prep Method:	

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch	
7440-50-8	Copper	12/16/2024 18:30	ND	ug/L	6.00	1	SG	SBL0277/SBL0277
7439-92-1	Lead	12/16/2024 18:30	ND	ug/L	2.00	1	SG	SBL0277/SBL0277

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-1

ANALYSIS DATA SHEET

Client: Tadco Engineering
Client Sample ID: Calibration Blank
Lab Sample ID: SBL0277-CCB9
Project: 4511 Liberty Ave
Work Order: 24L0602

Init/Final Vol: N/A
Matrix: Drinking Water
Prep Date: 12/16/2024 7:16:57PM
Prep Method:

Total Metals - Aqueous (EPA 200.8)



Q1.

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch	
7440-50-8	Copper	12/16/2024 19:16	ND	ug/L	6.00	1	SG	SBL0277/SBL0277
7439-92-1	Lead	12/16/2024 19:16	ND	ug/L	2.00	1	SG	SBL0277/SBL0277

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Tadco Engineering
Client Sample ID: Calibration Blank
Lab Sample ID: SBL0277-CCBA
Project: 4511 Liberty Ave
Work Order: 24L0602

Init/Final Vol: N/A
Matrix: Drinking Water

Prep Date: 12/16/2024 8:07:18PM
Prep Method:

Total Metals - Aqueous (EPA 200.8)

9
0.1

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch	
7440-50-8	Copper	12/16/2024 20:07	ND	ug/L	6.00	1	SG	SBL0277/SBL0277
7439-92-1	Lead	12/16/2024 20:07	ND	ug/L	2.00	1	SG	SBL0277/SBL0277

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Tadco Engineering
Client Sample ID: Calibration Blank
Lab Sample ID: SBL0277-CCBB
Project: 4511 Liberty Ave
Work Order: 24L0602

Init/Final Vol: N/A
Matrix: Drinking Water

Prep Date: 12/16/2024 8:57:37PM
Prep Method:

Total Metals - Aqueous (EPA 200.8)

9

0.1

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch	
7440-50-8	Copper	12/16/2024 20:57	ND	ug/L	6.00	1	SG	SBL0277/SBL0277
7439-92-1	Lead	12/16/2024 20:57	ND	ug/L	2.00	1	SG	SBL0277/SBL0277

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Tadco Engineering
Client Sample ID: Calibration Blank
Lab Sample ID: SBL0277-CCBC
Project: 4511 Liberty Ave
Work Order: 24L0602

Init/Final Vol: N/A

Matrix: Drinking Water

Prep Date: 12/16/2024 9:47:54PM

Prep Method:

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch	
7440-50-8	Copper	12/16/2024 21:47	ND	ug/L	6.00	1	SG	SBL0277/SBL0277
7439-92-1	Lead	12/16/2024 21:47	ND	ug/L	2.00	1	SG	SBL0277/SBL0277

ND - Indicates compound analyzed for but not detected

RL - Reporting limit

DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Tadco Engineering
Client Sample ID: Initial Cal Blank
Lab Sample ID: SBL0277-ICB1
Project: 4511 Liberty Ave
Work Order: 24L0602

Init/Final Vol: N/A
Matrix: Drinking Water

Prep Date: 12/16/2024 11:55:23AM
Prep Method:

Total Metals - Aqueous (EPA 200.8)



CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch	
7440-50-8	Copper	12/16/2024 11:55	ND	ug/L	6.00	1	SG	SBL0277/SBL0277
7439-92-1	Lead	12/16/2024 11:55	ND	ug/L	2.00	1	SG	SBL0277/SBL0277

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Tadco Engineering
Client Sample ID: FB
Lab Sample ID: 24L0602-01
Project: 4511 Liberty Ave
Work Order: 24L0602

Date Sampled:	12/04/24 10:00	Prep Date:	12/16/24 19:04
Init/Final Vol:	50 mL / 50 mL	Prep Method:	ICP-MS Metals No Prep
Matrix:	Drinking Water		

Total Metals - Aqueous (EPA 200.8)

9
9.2

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-50-8	Copper	12/16/24 19:04	ND	mg/L	0.00600	1	U	SG	SBL0277/BBL0990
7439-92-1	Lead	12/16/24 19:04	ND	mg/L	0.00200	1	U	SG	SBL0277/BBL0990

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: Tadco Engineering
Client Sample ID: S1-1st
Lab Sample ID: 24L0602-02
Project: 4511 Liberty Ave
Work Order: 24L0602

Date Sampled:	12/04/24 10:00	Prep Date:	12/16/24 19:08
Init/Final Vol:	50 mL / 50 mL	Prep Method:	ICP-MS Metals No Prep
Matrix:	Drinking Water		

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-50-8	Copper	12/16/24 19:08	0.0754	mg/L	0.00600	1		SG	SBL0277/BBL0990
7439-92-1	Lead	12/16/24 19:08	ND	mg/L	0.00200	1	U	SG	SBL0277/BBL0990

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: Tadco Engineering
Client Sample ID: S2
Lab Sample ID: 24L0602-03
Project: 4511 Liberty Ave
Work Order: 24L0602

Date Sampled:	12/04/24 10:06	Prep Date:	12/16/24 16:57
Init/Final Vol:	50 mL / 50 mL	Prep Method:	ICP-MS Metals No Prep
Matrix:	Drinking Water		

Total Metals - Aqueous (EPA 200.8)

9

9.2

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-50-8	Copper	12/16/24 16:57	0.0584	mg/L	0.00600	1		SG	SBL0277/BBL0990
7439-92-1	Lead	12/16/24 16:57	ND	mg/L	0.00200	1	U	SG	SBL0277/BBL0990

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-4

ANALYSIS DATA SHEET

Client: Tadco Engineering
 Client Sample ID: S3-1st
 Lab Sample ID: 24L0602-04
 Project: 4511 Liberty Ave
 Work Order: 24L0602

Date Sampled:	12/04/24 10:10	Prep Date:	12/16/24 19:21
Init/Final Vol:	50 mL / 50 mL	Prep Method:	ICP-MS Metals No Prep
Matrix:	Drinking Water		

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-50-8	Copper	12/16/24 19:21	0.144	mg/L	0.00600	1		SG	SBL0277/BBL0990
7439-92-1	Lead	12/16/24 19:21	ND	mg/L	0.00200	1	U	SG	SBL0277/BBL0990

ND, U - Indicates compound analyzed for but not detected
 D - Indicates result is based on a dilution
 E - Concentration exceeds highest calibration standard
 H - Indicates a Hold Time violation

RL - Reporting limit
 DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: Tadco Engineering
Client Sample ID: S4
Lab Sample ID: 24L0602-05
Project: 4511 Liberty Ave
Work Order: 24L0602

Date Sampled:	12/04/24 10:17	Prep Date:	12/16/24 19:25
Init/Final Vol:	50 mL / 50 mL	Prep Method:	ICP-MS Metals No Prep
Matrix:	Drinking Water		

Total Metals - Aqueous (EPA 200.8)

9

0.2

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-50-8	Copper	12/16/24 19:25	0.161	mg/L	0.00600	1		SG	SBL0277/BBL0990
7439-92-1	Lead	12/16/24 19:25	ND	mg/L	0.00200	1	U	SG	SBL0277/BBL0990

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

F-I

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

Total Metals - Quality Control
Pace Analytical Services, LLC-Fairfield

Batch BBL0990			Method: EPA 200.8			Prepared: 12/16/2024		
BBL0990-DUP1			Source: 24L0198-11					
Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Copper	0.291	mg/L		0.319			9.16	20
Lead	ND	mg/L		ND				20

Batch BBL0990 (cont.)			Method: EPA 200.8			Prepared: 12/16/2024		
BBL0990-MS1			Source: 24L0198-11					
Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Copper	0.385	mg/L	0.100	0.319	65.9*	70-130		
Lead	0.0958	mg/L	0.100	0.000544 J	95.3	70-130		

Batch BBL0990 (cont.)			Method: EPA 200.8			Prepared: 12/16/2024		
BBL0990-MSD1			Source: 24L0198-11					
Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Copper	0.374	mg/L	0.100	0.319	55.0*	70-130	2.86	20
Lead	0.0936	mg/L	0.100	0.000544 J	93.1	70-130	2.35	20

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL
 NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

METHOD BLANK SUMMARY

Batch ID: BBL0990

<u>Lab Number</u>	<u>Sample Id</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
BBL0990-DUP1	DUP1	12/16/2024	12/16/2024 16:44
BBL0990-MS1	MS1	12/16/2024	12/16/2024 16:49
BBL0990-MSD1	MSD1	12/16/2024	12/16/2024 16:53
24L0602-03	S2	12/16/2024	12/16/2024 16:57
24L0602-01	FB	12/16/2024	12/16/2024 19:04
24L0602-02	S1-1st	12/16/2024	12/16/2024 19:08
24L0602-04	S3-1st	12/16/2024	12/16/2024 19:21
24L0602-05	S4	12/16/2024	12/16/2024 19:25

9

9.4.

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Pace Analytical Services, LLC-Fairfield	Work Order:	24L0602
Client:	Tadco Engineering	Project:	4511 Liberty Ave
Sequence:	SBL0277	Instrument:	ICP/MS-3

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Initial Cal Check	SBL0277-ICV1	2024-12-16-b_#2-001	12/16/24 11:51
Initial Cal Blank	SBL0277-ICB1	2024-12-16-b_#2-002	12/16/24 11:55
Instrument RL Check	SBL0277-CRL1	2024-12-16-b_#2-003	12/16/24 11:59
Instrument RL Check	SBL0277-CRL2	2024-12-16-b_#2-004	12/16/24 12:03
Instrument RL Check	SBL0277-CRL3	2024-12-16-b_#2-005	12/16/24 12:08
Instrument RL Check	SBL0277-CRL4	2024-12-16-b_#2-006	12/16/24 12:12
Duplicate	BBL0990-DUP1	2024-12-16-b_#2-058	12/16/24 16:44
Matrix Spike	BBL0990-MS1	2024-12-16-b_#2-059	12/16/24 16:49
Matrix Spike Dup	BBL0990-MSD1	2024-12-16-b_#2-060	12/16/24 16:53
S2	24L0602-03	2024-12-16-b_#2-061	12/16/24 16:57
Calibration Check	SBL0277-CCV6	2024-12-16-b_#2-065	12/16/24 17:14
Calibration Blank	SBL0277-CCB6	2024-12-16-b_#2-066	12/16/24 17:18
Calibration Check	SBL0277-CCV7	2024-12-16-b_#2-071	12/16/24 17:40
Calibration Blank	SBL0277-CCB7	2024-12-16-b_#2-072	12/16/24 17:44
Calibration Check	SBL0277-CCV8	2024-12-16-b_#2-082	12/16/24 18:26
Calibration Blank	SBL0277-CCB8	2024-12-16-b_#2-083	12/16/24 18:30
FB	24L0602-01	2024-12-16-b_#2-091	12/16/24 19:04
S1-1st	24L0602-02	2024-12-16-b_#2-092	12/16/24 19:08
Calibration Check	SBL0277-CCV9	2024-12-16-b_#2-093	12/16/24 19:12
Calibration Blank	SBL0277-CCB9	2024-12-16-b_#2-094	12/16/24 19:16
S3-1st	24L0602-04	2024-12-16-b_#2-095	12/16/24 19:21
S4	24L0602-05	2024-12-16-b_#2-096	12/16/24 19:25
Calibration Check	SBL0277-CCVA	2024-12-16-b_#2-105	12/16/24 20:03
Calibration Blank	SBL0277-CCBA	2024-12-16-b_#2-106	12/16/24 20:07
Calibration Check	SBL0277-CCVB	2024-12-16-b_#2-117	12/16/24 20:53
Calibration Blank	SBL0277-CCBB	2024-12-16-b_#2-118	12/16/24 20:57
Calibration Check	SBL0277-CCVC	2024-12-16-b_#2-129	12/16/24 21:43
Calibration Blank	SBL0277-CCBC	2024-12-16-b_#2-130	12/16/24 21:47

F-V

SEQUENCE CALIBRATION CHECKS

EPA 200.8

Client: Tadco Engineering
Project: 4511 Liberty Ave
Work Order: 24L0602

Sequence: SBL0277
Instrument: ICP/MS-3

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SBL0277-ICV1	Copper	100	93.9	93.9	ug/L	90-110
	Lead	100	101	101	ug/L	90-110
SBL0277-CCV6	Copper	100	94.3	94.3	ug/L	85-115
	Lead	100	97.7	97.7	ug/L	85-115
SBL0277-CCV7	Copper	100	92.7	92.7	ug/L	85-115
	Lead	100	97.5	97.5	ug/L	85-115
SBL0277-CCV8	Copper	100	97.9	97.9	ug/L	85-115
	Lead	100	103	103	ug/L	85-115
SBL0277-CCV9	Copper	100	102	102	ug/L	85-115
	Lead	100	105	105	ug/L	85-115
SBL0277-CCVA	Copper	100	98.8	98.8	ug/L	85-115
	Lead	100	103	103	ug/L	85-115
SBL0277-CCVB	Copper	100	103	103	ug/L	85-115
	Lead	100	103	103	ug/L	85-115
SBL0277-CCVC	Copper	100	95.2	95.2	ug/L	85-115
	Lead	100	102	102	ug/L	85-115

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

F-VII