

October 3, 2023

Mr. Henry Ilges Jennings School District 2559 Dorwood Drive Jennings, MO 64136

RE: Drinking Water Sampling – Jennings School District Central Office

2559 Dorwood Drive Jennings, MO 63136

Project Number: 923235

Mr. Ilges,

OCCU-TEC, Inc. (OCCU-TEC) is pleased to present the following report for drinking water sampling completed at Jennings School District Central Office in Jennings, Missouri. The sampling was requested and approved by Mr. Henry Ilges of Jennings School District (JSD). OCCU-TEC completed drinking water sampling of all potential drinking water sources, sources used in food preparation, cleaning, and utensil cleaning. Drinking water sampling was completed in accordance with the requirements set forth in Missouri Senate Bill #681/662 known as the "Get the Lead Out of School Drinking Water Act".

#### METHODOLOGY

On August 9, 2023, Mr. Jeff Smith and Mr. Nathaniel Jones of OCCU-TEC completed testing of ten (10) sources throughout Jennings School District Central Office. Samples were collected as 'First Draw' samples after the fixtures had remained unused for a minimum period of 8 hours. Samples were collected in dedicated, laboratory-provided 250-milliliter plastic sample containers. Sample location information and photographic documentation are noted in the attached table.

Samples were shipped to Teklab, Inc. (Teklab) of Collinsville, Illinois for analysis using EPA method 200.8. Teklab is approved for sample analysis by the Missouri Department of Natural Resources (MDNR) under certification number 00930. A copy of the laboratory analytical results and Chain of Custody documentation are attached to this report.

#### **RESULTS**

Samples results were compared to the regulatory limit of 5 parts per billion (ppb) outlined in Missouri Senate Bill 681/662. Of the samples collected, four (4) of the ten (10) contained lead concentrations at or above 5 ppb. Below is a list of samples containing elevated concentrations of lead.

Sample ID	Location	Туре	Result (ug/L)
235-JCO-04	Lower Level,	Handwashing Sink	66.3
	Meeting Room	_	
235-JCO-05	Lower Level, C31	Restroom Sink	16.3
235-JCO-07	C3- superintendent	Restroom Sink	16.2
235-JCO-08	Upper Level C5	Restroom Sink	170

#### **LIMITATIONS**

At the request of JSD, janitorial closet sinks were excluded from sampling. OCCU-TEC recommends placing signage on all sources not sampled during this assessment that indicate the source is not to be used for drinking water.

#### **RECOMMENDATIONS**

The following recommendations are in accordance with Senate Bill 681/662.

In accordance with the requirements set forth in Missouri Bill 681/662, fixtures exhibiting lead concentrations above 5 ppb must be remediated by replacement of lead-containing pipes, solder, fittings or fixtures with lead-free components, or the school shall install filtration at each point where water enters the building until such time as the source can be remediated. If installing a filter is not feasible, the school shall provide purified water at each outlet inventoried.

Additionally, any water coolers or drinking water outlets identified by the United States Environmental Protection Agency (EPA) as not being lead-free under the federal Lead Contamination Control Act of 1988 shall be replaced unless the unit has been tested and determined to have lead results under 5 ppb.

Within two weeks after receiving test results, the school shall make all testing results and any lead remediation plans available on the school's website. The school shall notify parents and staff via written notification within seven (7) business days after receiving test results exceeding 5 ppb. The notification shall include the following:

- Test results and a summary explaining the results.
- A description of any remedial steps taken.

- A description of the general health effects of lead contamination and community specific resources.
- Provide bottled water if there is not enough water to meet the drinking water needs of the students, teachers, and staff.

For fixtures exhibiting results above 5 ppb, follow up random "Flush" sampling shall be conducted annually on at least 25-percent of the remediated outlets until all outlets have been remediated. Drinking water sampling shall be conducted annually and annual drinking water test results shall be submitted by the district to the Department of Health and Senior Services (MDHSS).

## SIGNATURE(S)

OCCU-TEC appreciates the opportunity to provide the above referenced consulting services to the JSD. If you have any questions regarding the contents of this report, please contact us at (816) 231-5580.

Respectfully,

Nathaniel Jones

**Environmental Technician** 

Hattan Der

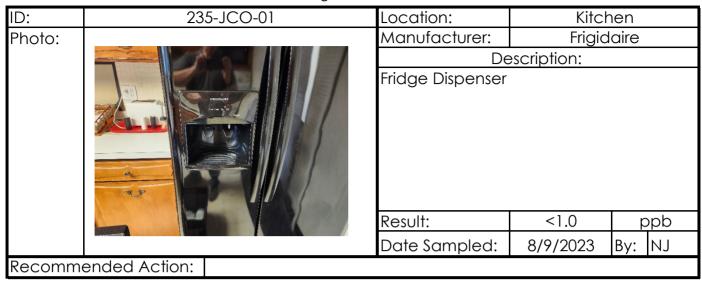
Jeff Smith Senior Project Manager (QA/QC)

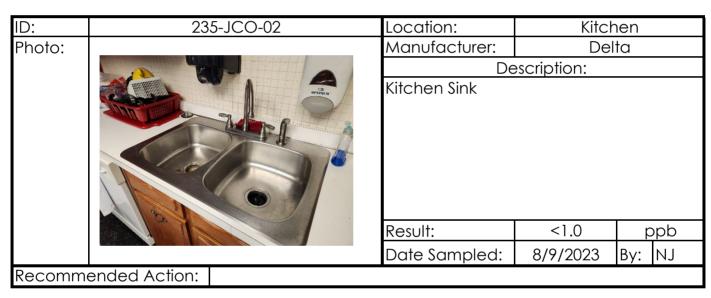
Gy Smith

#### **ATTACHMENTS**

Outlet Inventory with Analytical Results Summary Laboratory Analytical Results and COC Documentation

# ATTACHMENT 1 OUTLET INVENTORY WITH ANALYTICAL RESULTS SUMMARY







ID: 235-JCO-04 Lower Level, Mtg Rm Location: Photo: Manufacturer: РC Description: Handwashing Sink Result: 66.3 dqq Date Sampled: NJ 8/9/2023 By:

Recommended Action:

ID: 235-JCO-05 Location: Lower Level, C32 Photo: Manufacturer: Unknown Description: Restroom Sink Result: 16.3 ppb Date Sampled: NJ 8/9/2023 By: Recommended Action: Replace Fixture/Unit and Resample







ID:	235-JCO-09	Location:	Upper L	evel C7
Photo:		Manufacturer:	Мо	en
		De	escription:	
		Kitchenette Sink		
		Result:	<1.0	ppb
		Date Sampled:	8/9/2023	By: NJ
Recomm	nended Action:			

ID:	235-JCO-10	Location:	Upper Le	evel C10
Photo:		Manufacturer:	Unkn	iown
		De	escription:	
		Restroom Sink		
		Result:	2.1	ppb
		Date Sampled:	8/9/2023	By: NJ
Recomm	ended Action:			

# ATTACHMENT 2 LABORATORY ANALYTICAL RESULTS AND COC DOCUMENTATION



September 22, 2023

Kevin Heriford Occu-Tec 2604 NE Industrial Drive Suite 230 North Kansas, MO 64117 TEL: (816) 231-5580

FAX:



Illinois 100226 Kansas E-10374 Louisiana 05002 Louisiana 05003 Oklahoma 9978

**WorkOrder:** 23080812

Dear Kevin Heriford:

**RE:** 923235 JCO

TEKLAB, INC received 10 samples on 8/10/2023 8:00:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Patrick Riley
Project Manager

(618)344-1004 ex 44

patrickriley@teklabinc.com



# **Report Contents**

http://www.teklabinc.com/

Client: Occu-Tec Work Order: 23080812
Client Project: 923235 JCO Report Date: 22-Sep-23

#### This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	17
Chain of Custody	Appended



#### **Definitions**

http://www.teklabinc.com/

Client: Occu-Tec Work Order: 23080812
Client Project: 923235 JCO Report Date: 22-Sep-23

#### **Abbr Definition**

- \* Analytes on report marked with an asterisk are not NELAP accredited
- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
  - DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
  - DNI Did not ignite
- DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
- LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL "The method detection limit 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."
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- NC Data is not acceptable for compliance purposes
- ND Not Detected at the Reporting Limit

#### **NELAP NELAP Accredited**

- PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
- RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
- RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
- SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
- Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
- TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
- TNTC Too numerous to count ( > 200 CFU )



## **Definitions**

http://www.teklabinc.com/

Client: Occu-Tec Work Order: 23080812
Client Project: 923235 JCO Report Date: 22-Sep-23

#### Qualifiers

- # Unknown hydrocarbon
- C RL shown is a Client Requested Quantitation Limit
- H Holding times exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside recovery limits
- X Value exceeds Maximum Contaminant Level

- B Analyte detected in associated Method Blank
- E Value above quantitation range
- I Associated internal standard was outside method criteria
- M Manual Integration used to determine area response
- R RPD outside accepted recovery limits
- T TIC(Tentatively identified compound)



Client: Occu-Tec

## **Case Narrative**

http://www.teklabinc.com/

Work Order: 23080812

Report Date: 22-Sep-23

Client Project: 923235 JCO

Cooler Receipt Temp: NA °C

#### Locations

	Collinsville		Springfield	Kansas City		
Address	5445 Horseshoe Lake Road	Address	3920 Pintail Dr	Address	8421 Nieman Road	
	Collinsville, IL 62234-7425		Springfield, IL 62711-9415		Lenexa, KS 66214	
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998	
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998	
Email	jhriley@teklabinc.com	Email KKlostermann@teklabinc.com		Email	jhriley@teklabinc.com	
	Collinsville Air		Chicago			
Address	5445 Horseshoe Lake Road	Address	1319 Butterfield Rd.			
	Collinsville, IL 62234-7425		Downers Grove, IL 60515			
Phone	(618) 344-1004	Phone	(630) 324-6855			
Fax	(618) 344-1005	Fax				
Email	EHurley@teklabinc.com	Email	arenner@teklabinc.com			



## **Accreditations**

## http://www.teklabinc.com/

Work Order: 23080812 Client: Occu-Tec Client Project: 923235 JCO

Report Date: 22-Sep-23

State	Dept	Cert#	NELAP	<b>Exp Date</b>	Lab	
Illinois	IEPA	100226	NELAP	1/31/2024	Collinsville	
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville	
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville	
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville	
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville	
Arkansas	ADEQ	88-0966		3/14/2024	Collinsville	
Illinois	IDPH	17584		5/31/2025	Collinsville	
Iowa	IDNR	430		6/1/2024	Collinsville	
Kentucky	UST	0073		1/31/2024	Collinsville	
Missouri	MDNR	00930		5/31/2023	Collinsville	
Missouri	MDNR	930		1/31/2025	Collinsville	



http://www.teklabinc.com/

Client: Occu-Tec Work Order: 23080812

 Client Project: 923235 JCO
 Report Date: 22-Sep-23

 Lab ID: 23080812-001
 Client Sample ID: 235-JCO-01

	Analyses	Certification	RL Qı	ual Result	Units	DF	Date Analyzed Batch
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)							
Lead		NELAP	1.0	< 1.0	μg/L	1	09/19/2023 12:07 211266



http://www.teklabinc.com/

Client: Occu-Tec Work Order: 23080812

Client Project: 923235 JCO Report Date: 22-Sep-23

Lab ID: 23080812-002 Client Sample ID: 235-JCO-02

	Analyses	Certification	RL Qua	Result	Units	DF	Date Analyzed Batch
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)							
Lead		NELAP	1.0	< 1.0	μg/L	1	09/19/2023 12:32 211266



Client Project: 923235 JCO

# **Laboratory Results**

http://www.teklabinc.com/

Client: Occu-Tec Work Order: 23080812

Report Date: 22-Sep-23

Lab ID: 23080812-003 Client Sample ID: 235-JCO-03

	Analyses	Certification	RL Qua	l Result	Units	DF	Date Analyzed Batch
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)							
Lead		NELAP	1.0	1.6	μg/L	1	09/19/2023 12:36 211266



http://www.teklabinc.com/

Client: Occu-Tec Work Order: 23080812

Client Project: 923235 JCO Report Date: 22-Sep-23

Lab ID: 23080812-004 Client Sample ID: 235-JCO-04

	Analyses	Certification	RL Qua	ıl Result	Units	DF	Date Analyzed Batch
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)							
Lead		NELAP	1.0	66.3	μg/L	5	09/16/2023 16:55 211332



http://www.teklabinc.com/

Client: Occu-Tec Work Order: 23080812

Client Project: 923235 JCO Report Date: 22-Sep-23

Lab ID: 23080812-005 Client Sample ID: 235-JCO-05

	Analyses	Certification	RL Qual	Result	Units	DF	Date Analyzed Batch
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)							
Lead		NELAP	1.0	16.3	μg/L	1	09/19/2023 12:40 211266



http://www.teklabinc.com/

Client: Occu-Tec Work Order: 23080812

Client Project: 923235 JCO Report Date: 22-Sep-23

Lab ID: 23080812-006 Client Sample ID: 235-JCO-06

	Analyses	Certification	RL Qual	Result	Units	DF	Date Analyzed Batch
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)							
Lead		NELAP	1.0	< 1.0	μg/L	1	09/21/2023 8:16 211266



Client Project: 923235 JCO

# **Laboratory Results**

http://www.teklabinc.com/

Client: Occu-Tec Work Order: 23080812

Report Date: 22-Sep-23

Lab ID: 23080812-007 Client Sample ID: 235-JCO-07

	Analyses Certi		RL Qual	Result	Units	DF	Date Analyzed Batch
EPA 600 4	4.1.4, 200.8 R5.4,	METALS BY ICPMS (TO	TAL)				
Lead		NELAP	1.0	16.2	μg/L	1	09/19/2023 12:43 211266



http://www.teklabinc.com/

Client: Occu-Tec Work Order: 23080812

Client Project: 923235 JCO Report Date: 22-Sep-23

Lab ID: 23080812-008 Client Sample ID: 235-JCO-08

	Analyses	Certification	RL Qual	Result	Units	DF	Date Analyzed Batch
EPA 600 4	4.1.4, 200.8 R5.4,	METALS BY ICPMS (TO	ΓAL)				
Lead		NELAP	1.0	170	μg/L	5	09/16/2023 16:58 211333



Client Project: 923235 JCO

# **Laboratory Results**

http://www.teklabinc.com/

Client: Occu-Tec Work Order: 23080812

Report Date: 22-Sep-23

Lab ID: 23080812-009 Client Sample ID: 235-JCO-09

	Analyses	Certification	RL Qua	l Result	Units	DF	Date Analyzed Batch
EPA 600 4	4.1.4, 200.8 R5.4,	METALS BY ICPMS (TO	TAL)				
Lead		NELAP	1.0	< 1.0	μg/L	1	09/19/2023 12:47 211266



http://www.teklabinc.com/

Client: Occu-Tec Work Order: 23080812

 Client Project: 923235 JCO
 Report Date: 22-Sep-23

 Lab ID: 23080812-010
 Client Sample ID: 235-JCO-10

	Analyses	Certification	RL Qual	Result	Units	DF	Date Analyzed Batch
EPA 600	4.1.4, 200.8 R5.4,	METALS BY ICPMS (TO	AL)				
Lead		NELAP	1.0	2.1	μg/L	1	09/19/2023 12:50 211266



## **Receiving Check List**

http://www.teklabinc.com/

Work Order: 23080812 Client: Occu-Tec Client Project: 923235 JCO Report Date: 22-Sep-23 Carrier: Employee Received By: AMD mon Colei Reviewed by: Completed by: On: On: 10-Aug-23 10-Aug-23 Allison Colin Ellie Hopkins Chain of custody Extra pages included 0 Pages to follow: Shipping container/cooler in good condition? Yes **✓** No 🗔 Not Present Temp °C NA Type of thermal preservation? **~** Ice \_ Blue Ice None Dry Ice Chain of custody present? **~** No L Yes Chain of custody signed when relinquished and received? **~** Yes No L **~** Chain of custody agrees with sample labels? No 🗀 Yes **~** Samples in proper container/bottle? Yes No 🗀 **V** Sample containers intact? Yes No Sufficient sample volume for indicated test? Yes No **~** No  $\square$ All samples received within holding time? Yes NA 🗸 Field Lab  $\square$ Reported field parameters measured: Yes 🗸 No 🗌 Container/Temp Blank temperature in compliance? When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected. No VOA vials ✓ Water - at least one vial per sample has zero headspace? Yes 🗌 No 🗀 No 🗌 No TOX containers Water - TOX containers have zero headspace? Yes Yes 🗹 No 🗌 Water - pH acceptable upon receipt? Yes NA 🗹 NPDES/CWA TCN interferences checked/treated in the field? No  $\square$ 

Any No responses must be detailed below or on the COC.

Samples were checked for turbidity and then preserved with nitric acid upon arrival at the laboratory.

## Print PDF

## **CHAIN OF CUSTODY**

Pg of /	/ _Workorder#_	2308081	2
<b>→</b> — ←	<b>-</b> →	<del></del>	×

TEKLAB INC, 5445 Horseshoe Lake Road, Collinsville, IL 62234 Phone (618) 344-1004 Fax (618) 344-1005

Client: OCCU-TEC			Sam	ples	on:			ICE			BL	JE K	Œ		NO	ICE	7	14	₹ °C	:				
Address: 2604 NE Industrial Dr.			Prese	erve	d in:	:	Ø	LAB			FEL	D		<u>_</u> F	OR I	AB	JSE	ONI	<u>Y</u>					
City/State/Zip: Kansas City, MO 64117		<u>.</u>	LAB	NO	ΓES:	•																		
Contact: Kevin Heriford	Phone: 816-825-0628	3																						
Email: kheriford@occutec.com	Fax: 816-231-5641		Client Comments:																					
Are these samples known to be involved in litigation? If Are these samples known to be hazardous?  Are there any required reporting limits to be met on the limits in the comment section:	ease provide	>5ppb									WALVOID DEALIFORES													
PROJECT NAME/NUMBER 923235	SAMPLE COLLECTOR	'S NAME	# a	nd	Туре	e of	Co	ntai	ner	'S	1	IND	ICA	IE A	INAL	NALYSIS REQUESTED								
020200	Jeff Smith		]																		ļ			
RESULTS REQUESTED	BILLIN	IG INSTRUCTIONS	UNP		: E	-	ş	Na		Q	5								l		ļ			
✓ Standard       1-2 Day (100% S         Other       3 Day (50% Sure	- '			NaOH	H2SO4	디디	H	NaHSO4	TSP	Other									***************************************					
Lab Use Only Sample ID	Date/Time Sampled	Matrix										<u> </u>					<u> </u>	Щ						
23080812 -001 235- JCO -01	8/09/2023	Drinking Water				_									$\perp$	┸		Ш		$\perp$				
002 235- 300-02	8/09/2023	Drinking Water									est.				$\perp$			Ш		丄				
003 235- JCO -03	8/09/2023	Drinking Water				L											┸		$\bot$	$\perp$				
004 532- JCO-04	8/09/2023	Drinking Water										1						Ш						
ms 235- 100-05	8/09/2023	Drinking Water									8													
100 235- JCO -06	8/09/2023	Drinking Water									1	1						П						
235- 100-07	8/09/2023	Drinking Water									2						Τ	П	Т					
008 235- 100-08	8/09/2023	Drinking Water									-					T	Τ	П	T		1			
009 235- 300-09	8/09/2023	Drinking Water									7	1			$\top$	$\top$		П	T	T				
910 235- JCO - 10	8/09/2023	Drinking Water		T							۷					I			丁					
235-	8/09/2023	Drinking Water																						
Relipquished By		Date/Time					R	ece								Date/Time								
Jeff Smith	8/10/2023	<u> </u>	الالما	$   \Delta $	0	4	P	20	2C	<u> </u>	حد	<u>)                                    </u>				19/10/13 08,00								
																	•				•			
			<del> </del>					·							_									
			<del>                                     </del>										<del></del>		+			<u></u>						

<sup>\*</sup>The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions