

# ALS Environmental

Date: 22-Aug-24

**Client:**

**Project:** Washington and Carson; Champaign, IL

**Work Order:** 24080281

## Work Order Sample Summary

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<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
24080281-01	06-Washington and Carson; Champaign, IL	Soil		8/7/2024 14:09	8/8/2024 10:10	<input type="checkbox"/>

## ALS Environmental

Date: 22-Aug-24

**Client:**

**Project:** Washington and Carson; Champaign, IL

**Work Order:** 24080281

## Case Narrative

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The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Results relate only to the items tested and are not blank corrected unless indicated.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

The report was revised on August 22, 2024 to update client name details.

# ALS Environmental

Date: 22-Aug-24

**Client:**

**Project:** Washington and Carson; Champaign, IL  
**Sample ID:** 06-Washington and Carson; Champaign, IL  
**Collection Date:** 8/7/2024 02:09 PM

**Work Order:** 24080281  
**Lab ID:** 24080281-01  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>MOISTURE</b>			<b>SM2540B</b>			Analyst: <b>CS</b>
Moisture	19			% of sample	1	8/14/2024
<b>MERCURY BY CVAA</b>			<b>SW7471A</b>		Prep: EPA 7471 8/16/24 10:25	Analyst: <b>SLT</b>
Mercury	0.056		0.029	mg/Kg-dry	1	8/17/2024 02:09 PM
<b>METALS BY ICP</b>			<b>SW6010B</b>		Prep: SW3050B 8/9/24 11:16	Analyst: <b>SLT</b>
Aluminum	7,500		120	mg/Kg-dry	1	8/9/2024 01:23 PM
Antimony	0.87		0.49	mg/Kg-dry	1	8/9/2024 01:23 PM
Arsenic	4.6		1.2	mg/Kg-dry	1	8/9/2024 01:23 PM
Barium	100		4.9	mg/Kg-dry	1	8/9/2024 01:23 PM
Beryllium	0.54		0.24	mg/Kg-dry	1	8/9/2024 01:23 PM
Cadmium	0.30		0.24	mg/Kg-dry	1	8/9/2024 01:23 PM
Calcium	5,700		120	mg/Kg-dry	1	8/9/2024 01:23 PM
Chromium	16		2.4	mg/Kg-dry	1	8/9/2024 01:23 PM
Cobalt	2.7		1.2	mg/Kg-dry	1	8/9/2024 01:23 PM
Copper	19		1.2	mg/Kg-dry	1	8/9/2024 01:23 PM
Iron	8,000		24	mg/Kg-dry	1	8/9/2024 01:23 PM
Lead	48		4.9	mg/Kg-dry	1	8/9/2024 01:23 PM
Magnesium	2,400		24	mg/Kg-dry	1	8/9/2024 01:23 PM
Manganese	430		49	mg/Kg-dry	10	8/12/2024 02:10 PM
Nickel	19		2.4	mg/Kg-dry	1	8/9/2024 01:23 PM
Potassium	ND		1,200	mg/Kg-dry	10	8/12/2024 02:10 PM
Selenium	ND		0.73	mg/Kg-dry	1	8/9/2024 01:23 PM
Silver	ND		1.2	mg/Kg-dry	1	8/9/2024 01:23 PM
Sodium	ND		120	mg/Kg-dry	1	8/9/2024 01:23 PM
Thallium	ND		1.2	mg/Kg-dry	1	8/9/2024 01:23 PM
Vanadium	ND		1.2	mg/Kg-dry	1	8/9/2024 01:23 PM
Zinc	61		12	mg/Kg-dry	1	8/9/2024 01:23 PM

**Note:**

Batch ID: **101839** Instrument ID **HG3** Method: **SW7471A**

MBLK		Sample ID: <b>MBLK-101839-101839</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/17/2024 01:59 PM</b>		
Client ID:	Run ID: <b>HG3_240817B</b>	SeqNo: <b>3486923</b>	Prep Date: <b>8/16/2024</b>	DF: <b>1</b>						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.20								

LCS		Sample ID: <b>LCS-101839-101839</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/17/2024 02:01 PM</b>		
Client ID:	Run ID: <b>HG3_240817B</b>	SeqNo: <b>3486924</b>	Prep Date: <b>8/16/2024</b>	DF: <b>1</b>						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.8183	0.20	0.833		0	98.2	51.3-124	0		

LCSD		Sample ID: <b>LCSD-101839-101839</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/17/2024 02:04 PM</b>		
Client ID:	Run ID: <b>HG3_240817B</b>	SeqNo: <b>3486925</b>	Prep Date: <b>8/16/2024</b>	DF: <b>1</b>						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.8	0.20	0.833		0	96	51.3-124	0.8183	2.27	20

MS		Sample ID: <b>24080693-01B MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/17/2024 03:17 PM</b>		
Client ID:	Run ID: <b>HG3_240817B</b>	SeqNo: <b>3486945</b>	Prep Date: <b>8/16/2024</b>	DF: <b>1</b>						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.09451	0.022	0.09262		0	102	69-147	0		

MSD		Sample ID: <b>24080693-01B MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/17/2024 03:19 PM</b>		
Client ID:	Run ID: <b>HG3_240817B</b>	SeqNo: <b>3486946</b>	Prep Date: <b>8/16/2024</b>	DF: <b>1</b>						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.09529	0.023	0.09412		0	101	69-147	0.09451	0.819	20

The following samples were analyzed in this batch: 24080281-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client:

# QC BATCH REPORT

Work Order: 24080281

Project: Washington and Carson; Champaign, IL

Batch ID: **101684**

Instrument ID **ICP4**

Method: **SW6010B**

MBLK		Sample ID: <b>MBLK-101684-101684</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/9/2024 01:01 PM</b>		
Client ID:		Run ID: <b>ICP4_240809B</b>		SeqNo: <b>3479396</b>		Prep Date: <b>8/9/2024</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	ND	500								
Antimony	ND	2.0								
Arsenic	ND	5.0								
Barium	ND	20								
Beryllium	ND	1.0								
Cadmium	ND	1.0								
Calcium	ND	500								
Chromium	ND	10								
Cobalt	ND	5.0								
Copper	ND	5.0								
Iron	ND	100								
Lead	ND	20								
Magnesium	ND	100								
Manganese	ND	20								
Nickel	ND	10								
Selenium	ND	3.0								
Silver	ND	5.0								
Sodium	ND	500								
Thallium	ND	5.0								
Vanadium	ND	5.0								
Zinc	ND	50								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client:

QC BATCH REPORT

Work Order: 24080281

Project: Washington and Carson; Champaign, IL

Batch ID: 101684

Instrument ID ICP4

Method: SW6010B

LCS		Sample ID: LCS-101684-101684				Units: mg/Kg		Analysis Date: 8/9/2024 01:02 PM		
Client ID:		Run ID: ICP4_240809B			SeqNo: 3479397		Prep Date: 8/9/2024		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	86.95	500	100	0	87	80.1-111	0			J
Antimony	89.62	2.0	100	0	89.6	67-113	0			
Arsenic	96.58	5.0	100	0	96.6	87.1-109	0			
Barium	94.91	20	100	0	94.9	91.3-111	0			
Beryllium	91.39	1.0	100	0	91.4	79.5-109	0			
Cadmium	97.08	1.0	100	0	97.1	90.3-110	0			
Calcium	98.09	500	100	0	98.1	86.4-121	0			J
Chromium	96.42	10	100	0	96.4	82.5-113	0			
Cobalt	93.2	5.0	100	0	93.2	82.6-106	0			
Copper	94.7	5.0	100	0	94.7	86.7-107	0			
Iron	97.32	100	100	0	97.3	71.4-109	0			J
Lead	94.52	20	100	0	94.5	86.5-106	0			
Manganese	96.84	20	100	0	96.8	86.9-108	0			
Nickel	95.25	10	100	0	95.2	83.2-106	0			
Selenium	98.65	3.0	100	0	98.6	89.7-111	0			
Silver	90.48	5.0	100	0	90.5	80.4-106	0			
Sodium	94.54	500	100	0	94.5	84.6-115	0			J
Thallium	91.9	5.0	100	0	91.9	82.3-110	0			
Vanadium	92.99	5.0	100	0	93	81.5-106	0			
Zinc	95.07	50	100	0	95.1	86-112	0			

LCS		Sample ID: LCS-101684-101684				Units: mg/Kg		Analysis Date: 8/12/2024 11:26 AM		
Client ID:		Run ID: ICP1_240812A			SeqNo: 3480423		Prep Date: 8/9/2024		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Magnesium	98.2	100	100	0	98.2	79-108	0			J
Potassium	972.7	500	1000	0	97.3	42.3-114	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client:

# QC BATCH REPORT

Work Order: 24080281

Project: Washington and Carson; Champaign, IL

Batch ID: 101684

Instrument ID ICP4

Method: SW6010B

LCSD		Sample ID: LCSD-101684-101684				Units: mg/Kg		Analysis Date: 8/9/2024 01:04 PM		
Client ID:		Run ID: ICP4_240809B			SeqNo: 3479398		Prep Date: 8/9/2024		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	86.22	500	100	0	86.2	80.1-111	86.95	0	20	J
Antimony	88.69	2.0	100	0	88.7	67-113	89.62	1.04	20	
Arsenic	95.25	5.0	100	0	95.2	87.1-109	96.58	1.39	20	
Barium	92.95	20	100	0	93	91.3-111	94.91	2.09	20	
Beryllium	89.99	1.0	100	0	90	79.5-109	91.39	1.54	20	
Cadmium	95.4	1.0	100	0	95.4	90.3-110	97.08	1.75	20	
Calcium	95.7	500	100	0	95.7	86.4-121	98.09	0	20	J
Chromium	94.17	10	100	0	94.2	82.5-113	96.42	2.36	20	
Cobalt	91.37	5.0	100	0	91.4	82.6-106	93.2	1.98	20	
Copper	93.41	5.0	100	0	93.4	86.7-107	94.7	1.37	20	
Iron	96.32	100	100	0	96.3	71.4-109	97.32	0	20	J
Lead	92.76	20	100	0	92.8	86.5-106	94.52	1.88	20	
Manganese	94.93	20	100	0	94.9	86.9-108	96.84	1.99	20	
Nickel	93.5	10	100	0	93.5	83.2-106	95.25	1.85	20	
Selenium	96.12	3.0	100	0	96.1	89.7-111	98.65	2.6	20	
Silver	88.73	5.0	100	0	88.7	80.4-106	90.48	1.95	20	
Sodium	92.77	500	100	0	92.8	84.6-115	94.54	0	20	J
Thallium	90.62	5.0	100	0	90.6	82.3-110	91.9	1.4	20	
Vanadium	89.81	5.0	100	0	89.8	81.5-106	92.99	3.48	20	
Zinc	93.32	50	100	0	93.3	86-112	95.07	1.86	20	

LCSD		Sample ID: LCSD-101684-101684				Units: mg/Kg		Analysis Date: 8/12/2024 11:30 AM		
Client ID:		Run ID: ICP1_240812A			SeqNo: 3480424		Prep Date: 8/9/2024		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Magnesium	89.77	100	100	0	89.8	79-108	98.2	0	20	J
Potassium	874	500	1000	0	87.4	42.3-114	972.7	10.7	20	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:**  
**Work Order:** 24080281  
**Project:** Washington and Carson; Champaign, IL

# QC BATCH REPORT

Batch ID: **101684**      Instrument ID **ICP4**      Method: **SW6010B**

MS		Sample ID: <b>24080331-08A MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/9/2024 01:43 PM</b>		
Client ID:		Run ID: <b>ICP4_240809B</b>			SeqNo: <b>3479419</b>		Prep Date: <b>8/9/2024</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	5589	95	18.98	4695	4710	75-125	0			SO
Antimony	14.59	0.38	18.98	0.6437	73.5	61.8-111	0			
Arsenic	47.49	0.95	18.98	47.09	2.1	69.6-115	0			S
Barium	65.38	3.8	18.98	47.17	96	60.1-114	0			
Beryllium	16.09	0.19	18.98	0.3386	83	65.7-115	0			
Cadmium	17.24	0.19	18.98	0.3091	89.2	69.1-120	0			
Calcium	1238	95	18.98	1303	-344	75-125	0			SO
Chromium	23.31	1.9	18.98	6.407	89	69.3-116	0			
Cobalt	19.51	0.95	18.98	5.685	72.8	52.4-121	0			
Copper	32.95	0.95	18.98	11.63	112	67.4-115	0			
Iron	7280	19	18.98	7378	-514	75-125	0			SO
Lead	85.42	3.8	18.98	117.4	-168	69.3-107	0			SO
Magnesium	1205	19	18.98	1104	534	75-125	0			SO
Manganese	472	3.8	18.98	458.5	71.3	75-125	0			SEO
Nickel	25.66	1.9	18.98	9.488	85.2	63.6-105	0			
Selenium	16.43	0.57	18.98	0.1555	85.8	66.5-109	0			
Silver	16.98	0.95	18.98	0	89.4	70.3-116	0			
Sodium	63.1	95	18.98	45.51	92.7	64.7-138	0			J
Thallium	13	0.95	18.98	0.2067	67.4	54.6-115	0			
Vanadium	ND	0.95	18.98	0	0	75-125	0			S
Zinc	50.43	9.5	18.98	32.95	92.1	75-125	0			

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.



Client:  
 Work Order: 24080281  
 Project: Washington and Carson; Champaign, IL

# QC BATCH REPORT

Batch ID: **101684** Instrument ID **ICP4** Method: **SW6010B**

MSD		Sample ID: <b>24080331-08A MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/9/2024 01:45 PM</b>			
Client ID:		Run ID: <b>ICP4_240809B</b>			SeqNo: <b>3479420</b>		Prep Date: <b>8/9/2024</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Aluminum	6243	92	18.46	4695	8380	75-125	5589	11	20	SO	
Antimony	14	0.37	18.46	0.6437	72.3	61.8-111	14.59	4.15	20		
Arsenic	46.66	0.92	18.46	47.09	-2.32	69.6-115	47.49	1.76	20	S	
Barium	65.27	3.7	18.46	47.17	98.1	60.1-114	65.38	0.173	20		
Beryllium	15.85	0.18	18.46	0.3386	84	65.7-115	16.09	1.45	20		
Cadmium	16.85	0.18	18.46	0.3091	89.6	69.1-120	17.24	2.32	20		
Calcium	638.1	92	18.46	1303	-3600	75-125	1238	63.9	20	SRO	
Chromium	23.93	1.8	18.46	6.407	94.9	69.3-116	23.31	2.64	20		
Cobalt	20.81	0.92	18.46	5.685	81.9	52.4-121	19.51	6.44	20		
Copper	34.32	0.92	18.46	11.63	123	67.4-115	32.95	4.09	20	S	
Iron	7583	18	18.46	7378	1110	75-125	7280	4.07	20	SO	
Lead	60.76	3.7	18.46	117.4	-307	69.3-107	85.42	33.7	20	SRO	
Magnesium	1197	18	18.46	1104	502	75-125	1205	0.725	20	SO	
Manganese	505.4	3.7	18.46	458.5	254	75-125	472	6.82	20	SEO	
Nickel	25.72	1.8	18.46	9.488	87.9	63.6-105	25.66	0.236	20		
Selenium	15.64	0.55	18.46	0.1555	83.9	66.5-109	16.43	4.95	20		
Silver	16.67	0.92	18.46	0	90.3	70.3-116	16.98	1.84	20		
Sodium	62.76	92	18.46	45.51	93.4	64.7-138	63.1	0	20	J	
Thallium	11.9	0.92	18.46	0.2067	63.3	54.6-115	13	8.87	20		
Vanadium	ND	0.92	18.46	0	0	75-125	0	0	20	S	
Zinc	52.46	9.2	18.46	32.95	106	75-125	50.43	3.94	20		

The following samples were analyzed in this batch: 24080281-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

# ALS Environmental

Date: 22-Aug-24

**Client:**

**Project:** Washington and Carson; Champaign, IL

**WorkOrder:** 24080281

## QUALIFIERS, ACRONYMS, UNITS

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<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SDL	Sample Detection Limit
SW	SW-846 Method

<u>Units Reported</u>	<u>Description</u>
% of sample	
mg/Kg-dry	

Sample Receipt Checklist

Client Name:

Date/Time Received: **08-Aug-24 10:10**

Work Order: **24080281**

Received by: **AB1**

Checklist completed by **Alec Bolender**

08-Aug-24

Reviewed by: **Shawn Smythe**

19-Aug-24

eSignature

Date

eSignature

Date

Matrices: soil

Carrier name: UPS

Shipping container/cooler in good condition? Yes  No  Not Present

Custody seals intact on shipping container/cooler? Yes  No  Not Present

Custody seals intact on sample bottles? Yes  No  Not Present

Chain of custody present? Yes  No

Chain of custody signed when relinquished and received? Yes  No

Chain of custody agrees with sample labels? Yes  No

Samples in proper container/bottle? Yes  No

Sample containers intact? Yes  No

Sufficient sample volume for indicated test? Yes  No

All samples received within holding time? Yes  No

Container/Temp Blank temperature in compliance? Yes  No

Sample(s) received on ice? Yes  No

Temperature(s)/Thermometer(s): 4.6 120489

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage:

Water - VOA vials have zero headspace? Yes  No  No VOA vials submitted

Water - pH acceptable upon receipt? Yes  No  N/A

pH adjusted? Yes  No  N/A

pH adjusted by: -

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction: