

Work Orders: 5G25080

Project: Workorder#4300

Attn: Kathleen Kelly

Client: Orange County Environmental Man. Agency
2301 N. Glassel St.
Orange, CA 92865

Report Date: 8/01/2025

Received Date: 7/25/2025

Turnaround Time: 3 workdays

Phones: (714) 955-0657

Fax: (714) 955-0637

P.O. #: MA-080-17010712

Billing Code:

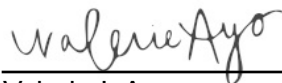
DoD-ELAP ANAB #ADE-2882 • DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • ISO17025 ANAB #L2457.01 • LACSD #10143

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Results are related only to the items tested. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. The report may include analytes that are not currently accreditable by some state agencies or accrediting bodies. This analytical report must be reproduced in its entirety.

Dear Kathleen Kelly,

Enclosed are the analytical results for the samples submitted under the attached Chain of Custody document. All analyses adhered to the method criteria, except where noted in the case narrative, sample condition checklist, and/or data qualifiers.

Reviewed by:



Valerie I. Ayo
Project Manager



Orange County Environmental Man. Agency
2301 N. Glassel St.
Orange, CA 92865

Project Number: Workorder#4300

Project Manager: Kathleen Kelly

Reported:
08/01/2025 11:43

Sample Condition

Temperature	2.20 C	
COC present	✓	COC completed properly ✓
COC matches sample labels	✓	Wet ice ✓
Blue ice		Sample(s) intact ✓
Sample(s) using proper containers	✓	Sample(s) have sufficient sample volume ✓
Sample(s) received within hold time	✓	Sample(s) labels have correct preservation ✓
Sample(s) have acceptable pH	✓	Sample(s) have acceptable CI

Sample Summary

Sample Name	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
4300001	OCPW	5G25080-01	Water	07/25/25 11:11	
4300002	OCPW	5G25080-02	Water	07/25/25 11:35	
4300003	OCPW	5G25080-03	Water	07/25/25 12:12	

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Sample Results

Sample: 4300001

Sampled: 07/25/25 11:11 by OCPW

5G25080-01 (Water)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
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Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500S2-D

Instr: _ANALYST

Batch ID: W5G2155

Preparation: _NONE (WETCHEM)

Prepared: 07/31/25 10:07

Analyst: mes

Sulfide, Total	ND	0.10	mg/l	1	07/31/25	
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Glyphosate & AMPA by EPA 547M LCMS

Method: EPA 547M

Instr: LCMS06

Batch ID: W5G1939

Preparation: _NONE (LC)

Prepared: 07/29/25 10:03

Analyst: JNA

Glyphosate	1.2	1.0	ug/l	1	07/29/25	
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Metals by EPA 200 Series Methods

Method: EPA 200.8

Instr: ICPMS06

Batch ID: W5G1849

Preparation: EPA 200.2

Prepared: 07/28/25 12:37

Analyst: JWC

Arsenic, Total	1.6	0.40	ug/l	1	07/30/25	
Cadmium, Total	1.8	0.20	ug/l	1	07/30/25	
Chromium, Total	0.57	0.20	ug/l	1	07/30/25	
Copper, Total	3.6	0.50	ug/l	1	07/30/25	
Iron, Total	250	20	ug/l	1	07/30/25	
Lead, Total	0.25	0.20	ug/l	1	07/30/25	
Nickel, Total	16	2.0	ug/l	1	07/30/25	
Selenium, Total	4.0	0.40	ug/l	1	07/30/25	
Silver, Total	ND	0.20	ug/l	1	07/30/25	
Thallium, Total	ND	0.20	ug/l	1	07/30/25	
Zinc, Total	14	10	ug/l	1	07/30/25	

Method: EPA 245.1

Instr: HG03

Batch ID: W5G1954

Preparation: EPA 245.1

Prepared: 07/29/25 10:47

Analyst: kjo

Mercury, Total	ND	0.050	ug/l	1	07/30/25	
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Sample Results

(Continued)

Sample: 4300002

Sampled: 07/25/25 11:35 by OCPW

5G25080-02 (Water)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods						
Method: SM 4500S2-D		Instr: _ANALYST				
Batch ID: W5G2155	Preparation: _NONE (WETCHEM)	Prepared: 07/31/25 10:07		Analyst: mes		
Sulfide, Total	ND	0.10	mg/l	1	07/31/25	
Glyphosate & AMPA by EPA 547M LCMS						
Method: EPA 547M		Instr: LCMS06				
Batch ID: W5G1939	Preparation: _NONE (LC)	Prepared: 07/29/25 10:03		Analyst: JNA		
Glyphosate	ND	1.0	ug/l	1	07/29/25	
Metals by EPA 200 Series Methods						
Method: EPA 200.8		Instr: ICPMS06				
Batch ID: W5G1849	Preparation: EPA 200.2	Prepared: 07/28/25 12:37		Analyst: JWC		
Arsenic, Total	1.9	0.40	ug/l	1	07/30/25	
Cadmium, Total	ND	0.20	ug/l	1	07/30/25	
Chromium, Total	ND	0.20	ug/l	1	07/30/25	
Copper, Total	1.9	0.50	ug/l	1	07/30/25	
Iron, Total	66	20	ug/l	1	07/30/25	
Lead, Total	ND	0.20	ug/l	1	07/30/25	
Nickel, Total	9.5	2.0	ug/l	1	07/30/25	
Selenium, Total	1.0	0.40	ug/l	1	07/30/25	
Silver, Total	ND	0.20	ug/l	1	07/30/25	
Thallium, Total	ND	0.20	ug/l	1	07/30/25	
Zinc, Total	ND	10	ug/l	1	07/30/25	
Method: EPA 245.1		Instr: HG03				
Batch ID: W5G1954	Preparation: EPA 245.1	Prepared: 07/29/25 10:47		Analyst: kjo		
Mercury, Total	ND	0.050	ug/l	1	07/30/25	

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Sample Results

(Continued)

Sample: 4300003

Sampled: 07/25/25 12:12 by OCPW

5G25080-03 (Water)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
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Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500S2-D

Instr: _ANALYST

Batch ID: W5G2155

Preparation: _NONE (WETCHEM)

Prepared: 07/31/25 10:07

Analyst: mes

Sulfide, Total	ND	0.10	mg/l	1	07/31/25	
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Glyphosate & AMPA by EPA 547M LCMS

Method: EPA 547M

Instr: LCMS06

Batch ID: W5G1939

Preparation: _NONE (LC)

Prepared: 07/29/25 10:03

Analyst: JNA

Glyphosate	ND	1.0	ug/l	1	07/29/25	
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Metals by EPA 200 Series Methods

Method: EPA 200.8

Instr: ICPMS06

Batch ID: W5G1849

Preparation: EPA 200.2

Prepared: 07/28/25 12:37

Analyst: JWC

Arsenic, Total	1.9	0.40	ug/l	1	07/30/25	
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Cadmium, Total	1.7	0.20	ug/l	1	07/30/25	
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Chromium, Total	0.43	0.20	ug/l	1	07/30/25	
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Copper, Total	3.9	0.50	ug/l	1	07/30/25	
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Iron, Total	59	20	ug/l	1	07/30/25	
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Lead, Total	ND	0.20	ug/l	1	07/30/25	
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Nickel, Total	19	2.0	ug/l	1	07/30/25	
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Selenium, Total	1.1	0.40	ug/l	1	07/30/25	
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Silver, Total	ND	0.20	ug/l	1	07/30/25	
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Thallium, Total	ND	0.20	ug/l	1	07/30/25	
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Zinc, Total	ND	10	ug/l	1	07/30/25	
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Method: EPA 245.1

Instr: HG03

Batch ID: W5G1954

Preparation: EPA 245.1

Prepared: 07/29/25 10:47

Analyst: kjo

Mercury, Total	ND	0.050	ug/l	1	07/30/25	
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Quality Control Results

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	Limit	RPD	Limit	Qualifier
Batch: W5G2155 - SM 4500S2-D										
Blank (W5G2155-BLK1)				Prepared & Analyzed: 07/31/25						
Sulfide, Total	ND	0.10	mg/l							
LCS (W5G2155-BS1)				Prepared & Analyzed: 07/31/25						
Sulfide, Total	0.100	0.10	mg/l	0.100		100	90-110			
Duplicate (W5G2155-DUP1)				Prepared & Analyzed: 07/31/25						
Sulfide, Total	0.200	0.10	mg/l		0.200			0	20	
Matrix Spike (W5G2155-MS1)				Prepared & Analyzed: 07/31/25						
Sulfide, Total	0.200	0.10	mg/l	0.200	ND	100	80-120			
Matrix Spike Dup (W5G2155-MSD1)				Prepared & Analyzed: 07/31/25						
Sulfide, Total	0.200	0.10	mg/l	0.200	ND	100	80-120	0	20	

Quality Control Results

Glyphosate & AMPA by EPA 547M LCMS

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	Limit	RPD	Limit	Qualifier
Batch: W5G1939 - EPA 547M										
Blank (W5G1939-BLK1)				Prepared & Analyzed: 07/29/25						
Glyphosate	ND	1.0	ug/l							
LCS (W5G1939-BS1)				Prepared & Analyzed: 07/29/25						
Glyphosate	10.9	1.0	ug/l	10.0		109	50-150			
Matrix Spike (W5G1939-MS1)				Prepared & Analyzed: 07/29/25						
Glyphosate	11.2	1.0	ug/l	10.0	0.714	105	41-149			
Matrix Spike Dup (W5G1939-MSD1)				Prepared & Analyzed: 07/29/25						
Glyphosate	10.8	1.0	ug/l	10.0	0.714	101	41-149	3	30	

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Quality Control Results

(Continued)

Metals by EPA 200 Series Methods

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W5G1849 - EPA 200.8									
Blank (W5G1849-BLK1)				Prepared: 07/28/25 Analyzed: 07/30/25					
Arsenic, Total	ND	0.40	ug/l						
Cadmium, Total	ND	0.20	ug/l						
Chromium, Total	ND	0.20	ug/l						
Copper, Total	ND	0.50	ug/l						
Iron, Total	ND	20	ug/l						
Lead, Total	ND	0.20	ug/l						
Nickel, Total	ND	2.0	ug/l						
Selenium, Total	ND	0.40	ug/l						
Silver, Total	ND	0.20	ug/l						
Thallium, Total	ND	0.20	ug/l						
Zinc, Total	ND	10	ug/l						
LCS (W5G1849-BS1)				Prepared: 07/28/25 Analyzed: 07/30/25					
Arsenic, Total	51.4	0.40	ug/l	50.0		103	85-115		
Cadmium, Total	50.5	0.20	ug/l	50.0		101	85-115		
Chromium, Total	50.7	0.20	ug/l	50.0		101	85-115		
Copper, Total	52.1	0.50	ug/l	50.0		104	85-115		
Iron, Total	1080	20	ug/l	1050		103	85-115		
Lead, Total	51.0	0.20	ug/l	50.0		102	85-115		
Nickel, Total	50.8	2.0	ug/l	50.0		102	85-115		
Selenium, Total	51.2	0.40	ug/l	50.0		102	85-115		
Silver, Total	50.4	0.20	ug/l	50.0		101	85-115		
Thallium, Total	51.1	0.20	ug/l	50.0		102	85-115		
Zinc, Total	51.1	10	ug/l	50.0		102	85-115		
Matrix Spike (W5G1849-MS1)				Source: 5G25080-02		Prepared: 07/28/25 Analyzed: 07/30/25			
Arsenic, Total	55.2	0.40	ug/l	50.0	1.92	107	70-130		
Cadmium, Total	49.1	0.20	ug/l	50.0	0.0834	98	70-130		
Chromium, Total	49.5	0.20	ug/l	50.0	0.166	99	70-130		
Copper, Total	50.7	0.50	ug/l	50.0	1.90	98	70-130		
Iron, Total	1120	20	ug/l	1050	66.2	100	70-130		
Lead, Total	53.1	0.20	ug/l	50.0	ND	106	70-130		
Nickel, Total	56.7	2.0	ug/l	50.0	9.53	94	70-130		
Selenium, Total	52.6	0.40	ug/l	50.0	1.01	103	70-130		
Silver, Total	48.3	0.20	ug/l	50.0	0.0274	96	70-130		
Thallium, Total	52.8	0.20	ug/l	50.0	ND	105	70-130		
Zinc, Total	51.9	10	ug/l	50.0	2.65	99	70-130		
Matrix Spike Dup (W5G1849-MSD1)				Source: 5G25080-02		Prepared: 07/28/25 Analyzed: 07/30/25			
Arsenic, Total	54.8	0.40	ug/l	50.0	1.92	106	70-130	0.7	30
Cadmium, Total	49.6	0.20	ug/l	50.0	0.0834	99	70-130	1	30
Chromium, Total	49.3	0.20	ug/l	50.0	0.166	98	70-130	0.5	30

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Quality Control Results

(Continued)

Metals by EPA 200 Series Methods (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W5G1849 - EPA 200.8 (Continued)										
Matrix Spike Dup (W5G1849-MSD1)		Source: 5G25080-02		Prepared: 07/28/25		Analyzed: 07/30/25				
Copper, Total	50.6	0.50	ug/l	50.0	1.90	97	70-130	0.2	30	
Iron, Total	1120	20	ug/l	1050	66.2	100	70-130	0.06	30	
Lead, Total	53.3	0.20	ug/l	50.0	ND	107	70-130	0.4	30	
Nickel, Total	56.9	2.0	ug/l	50.0	9.53	95	70-130	0.4	30	
Selenium, Total	52.4	0.40	ug/l	50.0	1.01	103	70-130	0.2	30	
Silver, Total	48.9	0.20	ug/l	50.0	0.0274	98	70-130	1	30	
Thallium, Total	52.4	0.20	ug/l	50.0	ND	105	70-130	0.7	30	
Zinc, Total	51.7	10	ug/l	50.0	2.65	98	70-130	0.5	30	
Batch: W5G1954 - EPA 245.1										
Blank (W5G1954-BLK1)				Prepared: 07/29/25		Analyzed: 07/30/25				
Mercury, Total	ND	0.050	ug/l							
LCS (W5G1954-BS1)				Prepared: 07/29/25		Analyzed: 07/30/25				
Mercury, Total	0.983	0.050	ug/l	1.00		98	85-115			
Matrix Spike (W5G1954-MS1)		Source: 5G25080-01		Prepared: 07/29/25		Analyzed: 07/30/25				
Mercury, Total	0.940	0.050	ug/l	1.00	ND	94	70-130			
Matrix Spike Dup (W5G1954-MSD1)		Source: 5G25080-01		Prepared: 07/29/25		Analyzed: 07/30/25				
Mercury, Total	0.966	0.050	ug/l	1.00	ND	97	70-130	3	20	

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Notes and Definitions

Item	Definition
%REC	Percent Recovery
Dil	Dilution
MRL	Method Reporting Limit (MRL) is the minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
RPD	Relative Percent Difference
Source	Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

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Analyses Accreditation Summary

Analyte	CAS #	Not By ELAP-CA	Not By NELAP OR	Not ANAB ISO 17025
EPA 547M in Water				
Glyphosate	1071-83-6		●	●

This laboratory report may contain results for target analytes that are not currently certifiable by the California Environmental Laboratory Accreditation Program (ELAP). ELAP is the state agency that accredits environmental testing laboratories in California <https://www.waterboards.ca.gov/drinking_water/certlic/labs/index.html>. ELAP certification is required for laboratories that perform testing for regulatory purposes, such as drinking water, wastewater, hazardous waste, and ambient water <https://www.waterboards.ca.gov/drinking_water/certlic/labs/apply.html>. However, ELAP does not certify all analytes or methods that a laboratory may offer. Therefore, some of the target analytes in this report may not have been tested under ELAP-approved methods or quality control procedures. The results for these analytes are provided for informational purposes only and should not be used for regulatory compliance or decision making. Please contact the laboratory if you have any questions or concerns about the report.