

DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following “ Results Qualifiers” are used:

J	Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
U	Indicates the analyte was analyzed for, but not detected.
ND	Indicates the analyte was analyzed for, but not detected
E	Indicates the reported value is estimated because of the presence of interference
M	Indicates Duplicate injection precision not met.
N	Indicates the spiked sample recovery is not within control limits.
S	Indicates the reported value was determined by the Method of Standard Addition (MSA).
*	Indicates that the duplicate analysis is not within control limits.
+	Indicates the correlation coefficient for the MSA is less than 0.995.
D	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
M	Method qualifiers “P” for ICP instrument “PM” for ICP when Microwave Digestion is used “CV” for Manual Cold Vapor AA “AV” for automated Cold Vapor AA “CA” for MIDI-Distillation Spectrophotometric “AS” for Semi -Automated Spectrophotometric “C” for Manual Spectrophotometric “T” for Titrimetric “NR” for analyte not required to be analyzed
OR	Indicates the analyte’s concentration exceeds the calibrated range of the instrument for that specific analysis.
Q	Indicates the LCS did not meet the control limits requirements
H	Sample Analysis Out Of Hold Time

LAB CHRONICLE

OrderID:	Q3528	OrderDate:	11/3/2025 11:29:00 AM
Client:	ATG-GREENVILLE AEC	Project:	AEC-2025-0013-CSC 6102 Mt.Vernon
Contact:	Staci Bruce	Location:	J11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3528-01	SW-2	Water			10/29/25 13:20			11/03/25
			COD	SM5220 D			11/04/25 13:08	
			TSS	SM2540 D			11/05/25 10:30	



SAMPLE DATA

Report of Analysis

Client: ATG-GREENVILLE AEC
Project: AEC-2025-0013-CSC 6102 Mt.Vernon
Client Sample ID: SW-2
Lab Sample ID: Q3528-01

Date Collected: 10/29/25 13:20
Date Received: 11/03/25
SDG No.: Q3528
Matrix: Water
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
COD	60.3		1	1.50	10.0	mg/L		11/04/25 13:08	SM 5220 D-11
TSS	324		1	1.00	4.00	mg/L		11/05/25 10:30	SM 2540 D-20

Comments: _____

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits



QC RESULT SUMMARY

Initial and Continuing Calibration Verification

Client: ATG-GREENVILLE AEC

SDG No.: Q3528

Project: AEC-2025-0013-CSC 6102 Mt.Vernon

RunNo.: LB137760

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: COD	ICV	mg/L	50.173	50	100	95-105	09/08/2025
Sample ID: COD	CCV1	mg/L	51.184	50	102	95-105	11/04/2025
Sample ID: COD	CCV2	mg/L	49.161	50	98	95-105	11/04/2025
Sample ID: COD	CCV3	mg/L	50.173	50	100	95-105	11/04/2025

Initial and Continuing Calibration Blank Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q3528

Project: AEC-2025-0013-CSC 6102 Mt.Vernon

RunNo.: LB137760

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB COD	mg/L	< 5.0000	5.0000	U	1.50	10	09/08/2025
Sample ID: CCB1 COD	mg/L	< 5.0000	5.0000	U	1.50	10	11/04/2025
Sample ID: CCB2 COD	mg/L	< 5.0000	5.0000	U	1.50	10	11/04/2025
Sample ID: CCB3 COD	mg/L	< 5.0000	5.0000	U	1.50	10	11/04/2025

Preparation Blank Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q3528

Project: AEC-2025-0013-CSC 6102 Mt.Vernon

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: COD	LB137760BL mg/L	< 5.0000	5.0000	U	1.5	10.0	11/04/2025
Sample ID: TSS	LB137774BL mg/L	< 2.0000	2.0000	U	1	4	11/05/2025

Matrix Spike Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q3528
Project:	AEC-2025-0013-CSC 6102 Mt.Vernon	Sample ID:	Q3507-01
Client ID:	SW-1MS	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
COD	mg/L	75-125	61.3		19.8		50.0	1	83		11/04/2025

Matrix Spike Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q3528
Project:	AEC-2025-0013-CSC 6102 Mt.Vernon	Sample ID:	Q3507-01
Client ID:	SW-1MSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
COD	mg/L	75-125	63.3		19.8		50.0	1	87		11/04/2025

Duplicate Sample Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q3528
Project:	AEC-2025-0013-CSC 6102 Mt.Vernon	Sample ID:	Q3507-01
Client ID:	SW-1DUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
COD	mg/L	+/-20	19.8		19.8		1	0		11/04/2025

Duplicate Sample Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q3528
Project:	AEC-2025-0013-CSC 6102 Mt.Vernon	Sample ID:	Q3507-01
Client ID:	SW-1MSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
COD	mg/L	+/-20	61.3		63.3		1	3.21		11/04/2025

Duplicate Sample Summary

Client: ATG-GREENVILLE AEC	SDG No.: Q3528
Project: AEC-2025-0013-CSC 6102 Mt.Vernon	Sample ID: Q3528-01
Client ID: SW-2DUP	Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
TSS	mg/L	+/-5	324		325		1	0.18		11/05/2025

Laboratory Control Sample Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q3528

Project: AEC-2025-0013-CSC 6102 Mt.Vernon

Run No.: LB137760

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137760BS							
COD	mg/L	50	49.2		98	1	90-110	11/04/2025

Laboratory Control Sample Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q3528

Project: AEC-2025-0013-CSC 6102 Mt.Vernon

Run No.: LB137774

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137774BS							
TSS	mg/L	550	533		97	1	90-110	11/05/2025



RAW DATA

Analytical Summary Report

Analysis Method: SM5220 D

ANALYST: Eman

Parameter: COD

SUPERVISOR REVIEW BY: Iwona

Run Number: LB137760

Reagent/Standard	Lot/Log #
COD calibration std. 150 ppm	WP114659
COD calibration std. 100 ppm	WP114658
COD calibration std. 50 ppm	WP114656
COD calibration std. 10 ppm	WP114655
COD calibration std. 0 ppm	WP114654
COD ICV-LCS std, 50ppm	WP114661
COD calibration std. 75 ppm	WP114657
COD Digestion Vials Low Level 0-150Mg/L	W3230
COD LOQ std, 10.0PPM	WP115437
COD CCV std, 50ppm	WP115438
COD ICV-LCS std, 50ppm	WP115439
COD LOD std, 5ppm	WP115436
RL CHECK	WP115440

Temp In (C): 149	Date In: 11/04/2025	Time In: 09:15
Temp Out (C): 152	Date Out: 11/04/2025	Time Out: 11:15

Intercept: 0.3943

Slope: 0.9887

Regression: 0.9996

Seq	Lab ID	TrueValue (mg/l)	DF	MATRIX	Reading	Result (mg/l)	%D	Anal Date	Anal Time
1	CAL1	0	1	Water	0.000	-0.399		09/08/2025	13:30
2	CAL2	10	1	Water	9.000	8.704	-13	09/08/2025	13:30
3	CAL3	50	1	Water	51.000	51.184	2.4	09/08/2025	13:31
4	CAL4	75	1	Water	77.000	77.481	3.3	09/08/2025	13:31
5	CAL5	100	1	Water	98.000	98.721	-1.3	09/08/2025	13:32
6	CAL6	150	1	Water	148.000	149.293	-0.5	09/08/2025	13:32

Analytical Summary Report

Analysis Method: SM5220 D

ANALYST: Eman

Parameter: COD

SUPERVISOR REVIEW BY: Iwona

Run Number: LB137760

Seq	Lab ID	True Value (mg/l)	Initial Weight (g)	Final Vol (ml)	DF	MATRIX	Reading	Result	AnalDate	AnalTime
1	ICV	50	NA	NA	1	Water	50.000	50.173	09/08/2025	13:33
2	ICB		NA	NA	1	Water	1.000	0.613	09/08/2025	13:33
3	CCV1	50	NA	NA	1	Water	51.000	51.184	11/04/2025	13:00
4	CCB1		NA	NA	1	Water	0.000	-0.399	11/04/2025	13:00
5	RL Check	10	NA	NA	1	Water	9.000	8.704	11/04/2025	13:01
6	LB137760BL		NA	NA	1	Water	0.000	-0.399	11/04/2025	13:01
7	LB137760BS	50	NA	NA	1	Water	49.000	49.161	11/04/2025	13:02
8	Q3507-01		NA	NA	1	Water	20.000	19.830	11/04/2025	13:02
9	Q3507-01DUP		NA	NA	1	Water	20.000	19.830	11/04/2025	13:03
10	Q3507-01MS	50	NA	NA	1	Water	61.000	61.298	11/04/2025	13:03
11	Q3507-01MSD	50	NA	NA	1	Water	63.000	63.321	11/04/2025	13:04
12	Q3508-01		NA	NA	1	Water	23.000	22.864	11/04/2025	13:04
13	Q3509-01		NA	NA	1	Water	39.000	39.047	11/04/2025	13:05
14	Q3509-03		NA	NA	1	Water	38.000	38.036	11/04/2025	13:05
15	Q3510-01		NA	NA	1	Water	61.000	61.298	11/04/2025	13:06
16	CCV2	50	NA	NA	1	Water	49.000	49.161	11/04/2025	13:06
17	CCB2		NA	NA	1	Water	1.000	0.613	11/04/2025	13:07
18	Q3511-01		NA	NA	1	Water	3.000	2.635	11/04/2025	13:07
19	Q3511-02		NA	NA	1	Water	24.000	23.875	11/04/2025	13:08
20	Q3528-01		NA	NA	1	Water	60.000	60.287	11/04/2025	13:08
21	Q3529-01		NA	NA	20	Water	66.000	66.356	11/04/2025	13:09
22	Q3530-07		NA	NA	1	Water	4.000	3.647	11/04/2025	13:09
23	Q3530-08		NA	NA	1	Water	10.000	9.715	11/04/2025	13:10
24	CCV3	50	NA	NA	1	Water	50.000	50.173	11/04/2025	13:10
25	CCB3		NA	NA	1	Water	0.000	-0.399	11/04/2025	13:11

16137760

WORKLIST(Hardcopy Internal Chain)

WorkList Name : COD-110425

WorkList ID : 192863

Department : Wet-Chemistry

Date : 11-04-2025 08:17:48

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3507-01	SW-1	Water	COD	Conc H2SO4 to pH < 2	ATGG01	J12	10/30/2025	SM5220 D
Q3508-01	SW-1	Water	COD	Conc H2SO4 to pH < 2	ATGG01	J21	10/30/2025	SM5220 D
Q3509-01	DSN002	Water	COD	Conc H2SO4 to pH < 2	PSEG04	D41	10/31/2025	SM5220 D
Q3509-03	DSN003	Water	COD	Conc H2SO4 to pH < 2	PSEG04	D41	10/31/2025	SM5220 D
Q3510-01	OUTFALL-002	Water	COD	Conc H2SO4 to pH < 2	ATGG01	D41	10/30/2025	SM5220 D
Q3511-01	OUTFALL-001	Water	COD	Conc H2SO4 to pH < 2	ATGG01	D41	10/30/2025	SM5220 D
Q3511-02	OUTFALL-002	Water	COD	Conc H2SO4 to pH < 2	ATGG01	D41	10/30/2025	SM5220 D
Q3528-01	SW-2	Water	COD	Conc H2SO4 to pH < 2	ATGG01	D41	10/30/2025	SM5220 D
Q3529-01	SW1	Water	COD	Conc H2SO4 to pH < 2	ATGG01	J11	10/29/2025	SM5220 D
Q3530-07	LOD-MDL-WATER-01-QT4-202	Water	COD	Conc H2SO4 to pH < 2	ATGG01	J11	10/29/2025	SM5220 D
Q3530-08	LOQ-WATER-02-QT4-2025	Water	COD	Conc H2SO4 to pH < 2	ALLI03	QA Of	11/03/2025	SM5220 D
					ALLI03	QA Of	11/03/2025	SM5220 D

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:

Page 1 of 1

TOTAL SUSPENDED SOLIDS - SM2540D

SUPERVISOR: rubina

ANALYST: jignesh

Date: 11/04/2025

Run Number: LB137774

BalanceID: WC SC-5

OvenID: WC OVEN-1

FilterID: 17416528

ThermometerID: WET OVEN#1

TEMP1 IN: 104 °C 11/04/2025 14:00 **TEMP1 OUT:** 103 °C 11/04/2025 15:30
TEMP2 IN: 104 °C 11/04/2025 16:00 **TEMP2 OUT:** 104 °C 11/04/2025 17:00
TEMP3 IN: 104 °C 11/05/2025 10:30 **TEMP3 OUT:** 103 °C 11/05/2025 12:10
TEMP4 IN: 104 °C 11/05/2025 13:00 **TEMP4 OUT:** 103 °C 11/05/2025 14:35

Dish #	Lab ID	Client ID	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Sample Volume (ml)	1st Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	2nd Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	Final Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	Weight (g)	Result mg/L
1	LB137774BL	LB137774BL	1.5896	1.5897	100	1.5897	1.5897	1.5897	0.0000	0
2	LB137774BS	LB137774BS	1.4713	1.4713	100	1.5246	1.5246	1.5246	0.0533	533
3	Q3527-01	RW8-SP100-20251030	1.4885	1.4885	1900	1.4887	1.4887	1.4887	0.0002	0.1
4	Q3527-02	RW8-SP303-20251030	1.4799	1.4799	1800	1.4800	1.4800	1.4800	0.0001	0.1
5	Q3528-01	SW-2	1.4899	1.4899	500	1.6521	1.6521	1.6521	0.1622	324.4
6	Q3528-01DUP	SW-2DUP	1.4813	1.4813	500	1.6438	1.6438	1.6438	0.1625	325
7	Q3529-01	SW1	1.4940	1.4940	1000	5.1645	5.1645	5.1645	3.6705	3670.5
8	Q3537-03	MW-17-PURGE-WATER	1.4947	1.4947	2000	1.5083	1.5083	1.5083	0.0136	6.8
9	Q3541-01	N48969	1.4752	1.4752	2000	1.7916	1.7916	1.7916	0.3164	158.2

A = Sample Volume (ml)
 B = Final Empty Dish Weight (g)
 C = Final Empty Dish + Sample weight after 1.5 hr drying @105°C(g)
 D = Weight (g)

Weight (g) = C - B

Result mg/L = $\frac{D}{A} \times 1000 \times 1000$

WORKLIST(Hardcopy Internal Chain)

137774

WorkList Name : tss q3541 WorkList ID : 192891 Department : Wet-Chemistry Date : 11-05-2025 08:42:46

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3527-01	B,C RW8-SP100-20251030	Water	TSS	Cool 4 deg C	TETR06	J32	10/30/2025	SM2540 D
Q3527-02	B,C RW8-SP303-20251030	Water	TSS	Cool 4 deg C	TETR06	J32	10/30/2025	SM2540 D
Q3528-01	B SW-2	Water	TSS	Cool 4 deg C	ATGG01	J11	10/29/2025	SM2540 D
Q3529-01	B SW1	Water	TSS	Cool 4 deg C	ATGG01	J11	10/29/2025	SM2540 D
Q3537-03	K6 MW-17-WATER	Water	TSS	Cool 4 deg C	PSEG03	D41	11/04/2025	SM2540 D
Q3541-01	12,3 N48969	Water	TSS	Cool 4 deg C	PSEG03	D41	11/04/2025	SM2540 D

Date/Time 11/05/25 08:50
Raw Sample Received by: To wll
Raw Sample Relinquished by: To wll

Date/Time 11/05/25 13:00
Raw Sample Received by: To wll
Raw Sample Relinquished by: To wll

Instrument ID: SPECTROPHOTOMETER-2

Daily Analysis Runlog For Sequence/QC Batch ID # LB137760

Review By	Eman	Review On	11/4/2025 2:32:40 PM
Supervise By	Iwona	Supervise On	11/4/2025 2:35:34 PM
SubDirectory	LB137760	Test	COD
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP114659,WP114658,WP114656,WP114655,WP114654,WP114661,WP114657,W3230,WP115437,WP115438,WP1		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	09/08/25 13:30		Eman	OK
2	CAL2	CAL2	CAL	09/08/25 13:30		Eman	OK
3	CAL3	CAL3	CAL	09/08/25 13:31		Eman	OK
4	CAL4	CAL4	CAL	09/08/25 13:31		Eman	OK
5	CAL5	CAL5	CAL	09/08/25 13:32		Eman	OK
6	CAL6	CAL6	CAL	09/08/25 13:32		Eman	OK
7	ICV	ICV	ICV	09/08/25 13:33		Eman	OK
8	ICB	ICB	ICB	09/08/25 13:33		Eman	OK
9	CCV1	CCV1	CCV	11/04/25 13:00		Eman	OK
10	CCB1	CCB1	CCB	11/04/25 13:00		Eman	OK
11	RL Check	RL Check	RL	11/04/25 13:01		Eman	OK
12	LB137760BL	LB137760BL	MB	11/04/25 13:01		Eman	OK
13	LB137760BS	LB137760BS	LCS	11/04/25 13:02		Eman	OK
14	Q3507-01	SW-1	SAM	11/04/25 13:02		Eman	OK
15	Q3507-01DUP	SW-1DUP	DUP	11/04/25 13:03		Eman	OK
16	Q3507-01MS	SW-1MS	MS	11/04/25 13:03		Eman	OK
17	Q3507-01MSD	SW-1MSD	MSD	11/04/25 13:04		Eman	OK
18	Q3508-01	SW-1	SAM	11/04/25 13:04		Eman	OK

Instrument ID: SPECTROPHOTOMETER-2

Daily Analysis Runlog For Sequence/QC Batch ID # LB137760

Review By	Eman	Review On	11/4/2025 2:32:40 PM
Supervise By	Iwona	Supervise On	11/4/2025 2:35:34 PM
SubDirectory	LB137760	Test	COD
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP114659,WP114658,WP114656,WP114655,WP114654,WP114661,WP114657,W3230,WP115437,WP115438,WP1		

19	Q3509-01	DSN002	SAM	11/04/25 13:05		Eman	OK
20	Q3509-03	DSN003	SAM	11/04/25 13:05		Eman	OK
21	Q3510-01	OUTFALL-002	SAM	11/04/25 13:06		Eman	OK
22	CCV2	CCV2	CCV	11/04/25 13:06		Eman	OK
23	CCB2	CCB2	CCB	11/04/25 13:07		Eman	OK
24	Q3511-01	OUTFALL-001	SAM	11/04/25 13:07		Eman	OK
25	Q3511-02	OUTFALL-002	SAM	11/04/25 13:08		Eman	OK
26	Q3528-01	SW-2	SAM	11/04/25 13:08		Eman	OK
27	Q3529-01	SW1	SAM	11/04/25 13:09		Eman	OK
28	Q3530-07	LOD-MDL-WATER-01	SAM	11/04/25 13:09		Eman	OK
29	Q3530-08	LOQ-WATER-02-QT4	SAM	11/04/25 13:10		Eman	OK
30	CCV3	CCV3	CCV	11/04/25 13:10		Eman	OK
31	CCB3	CCB3	CCB	11/04/25 13:11		Eman	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB137774

Review By	jignesh	Review On	11/6/2025 8:51:25 AM
Supervise By	rubina	Supervise On	11/6/2025 12:04:59 PM
SubDirectory	LB137774	Test	TSS
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	N/A		

Sr#	SampleID	ClientID	QcType	Date	Comment	Operator	Status
1	LB137774BL	LB137774BL	MB	11/05/25 10:30		jignesh	OK
2	LB137774BS	LB137774BS	LCS	11/05/25 10:30		jignesh	OK
3	Q3527-01	RW8-SP100-2025103	SAM	11/05/25 10:30		jignesh	OK
4	Q3527-02	RW8-SP303-2025103	SAM	11/05/25 10:30		jignesh	OK
5	Q3528-01	SW-2	SAM	11/05/25 10:30		jignesh	OK
6	Q3528-01DUP	SW-2DUP	DUP	11/05/25 10:30		jignesh	OK
7	Q3529-01	SW1	SAM	11/05/25 10:30		jignesh	OK
8	Q3537-03	MW-17-PURGE-WAT	SAM	11/05/25 10:30		jignesh	OK
9	Q3541-01	N48969	SAM	11/05/25 10:30		jignesh	OK

Prep Standard - Chemical Standard Summary

Order ID : Q3528

Test : COD,TSS

Prepbatch ID :

Sequence ID/Qc Batch ID: LB137760, LB137774,

Standard ID :

WP114652, WP114653, WP114654, WP114655, WP114656, WP114657, WP114658, WP114659, WP114661, WP115434, WP115435, WP115436, WP115437, WP115438, WP115439, WP115440,

Chemical ID :

W3112, W3169, W3219, W3230,



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2456	COD Stock std, 1000ppm	WP114652	09/08/2025	09/15/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh
<u>FROM</u> 0.08500gram of W3219 + 100.00000ml of W3112 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2457	COD Stock std-SS, 1000ppm	WP114653	09/08/2025	09/15/2025	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	None	Jignesh Parikh 09/11/2025
<u>FROM</u>	0.08500gram of W3169 + 100.00000ml of W3112 = Final Quantity: 100.000 ml							

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
139	COD calibration std. 0 ppm	WP114654	09/08/2025	09/15/2025	Iwona Zarych	None	None	Jignesh Parikh
								09/11/2025

FROM 10.00000ml of W3112 = Final Quantity: 10.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
138	COD calibration std. 10 ppm	WP114655	09/08/2025	09/15/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh
								09/11/2025

FROM 9.90000ml of W3112 + 0.10000ml of WP114652 = Final Quantity: 10.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
137	COD calibration std. 50 ppm	WP114656	09/08/2025	09/15/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 09/11/2025
<u>FROM</u>	9.50000ml of W3112 + 0.50000ml of WP114652 = Final Quantity: 10.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4161	COD calibration std. 75 ppm	WP114657	09/08/2025	09/15/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 09/11/2025
<u>FROM</u> 9.25000ml of W3112 + 0.75000ml of WP114652 = Final Quantity: 10.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
136	COD calibration std. 100 ppm	WP114658	09/08/2025	09/15/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/11/2025
FROM 9.00000ml of W3112 + 1.00000ml of WP114652 = Final Quantity: 10.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
135	COD calibration std. 150 ppm	WP114659	09/08/2025	09/15/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/11/2025
FROM 8.50000ml of W3112 + 1.50000ml of WP114652 = Final Quantity: 10.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2459	COD ICV-LCS std, 50ppm	WP114661	09/08/2025	09/15/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 09/11/2025
FROM 9.50000ml of W3112 + 0.50000ml of WP114653 = Final Quantity: 10.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2456	COD Stock std, 1000ppm	WP115434	11/04/2025	11/11/2025	Eman Mughal	WETCHEM_SCALE_5 (WC SC-5)	None	Iwona Zarych 11/05/2025
<u>FROM</u>	0.08500gram of W3169 + 100.00000ml of W3112 = Final Quantity: 100.000 ml							



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2457	COD Stock std-SS, 1000ppm	WP115435	11/04/2025	11/11/2025	Eman Mughal	WETCHEM_S CALE_5 (WC SC-5)	None	Iwona Zarych 11/05/2025
<u>FROM</u>	0.08500gram of W3219 + 100.00000ml of W3112 = Final Quantity: 100.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3580	COD LOD std, 5ppm	WP115436	11/04/2025	11/11/2025	Eman Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 11/05/2025
<u>FROM</u> 49.75000ml of W3112 + 0.25000ml of WP115434 = Final Quantity: 50.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2069	COD LOQ std, 10.0PPM	WP115437	11/04/2025	11/11/2025	Eman Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 11/05/2025
<u>FROM</u> 49.50000ml of W3112 + 0.50000ml of WP115435 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2458	COD CCV std, 50ppm	WP115438	11/04/2025	11/11/2025	Eman Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 11/05/2025
<u>FROM</u> 9.50000ml of W3112 + 0.50000ml of WP115434 = Final Quantity: 10.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2459	COD ICV-LCS std, 50ppm	WP115439	11/04/2025	11/11/2025	Eman Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<u>FROM</u>		9.50000ml of W3112 + 0.50000ml of WP115435 = Final Quantity: 10.000 ml						

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4162	RL CHECK	WP115440	11/04/2025	11/11/2025	Eman Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 11/05/2025
<u>FROM</u> 9.90000ml of W3112 + 0.10000ml of WP115434 = Final Quantity: 10.000 ml								

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / lwona	07/03/2024 / lwona	W3112

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P243-500 / Potassium Hydrogen Phthalate, 500 gms	24H0956262	04/28/2026	01/03/2025 / lwona	01/03/2025 / lwona	W3169

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P243-500 / Potassium Hydrogen Phthalate, 500 gms	2025040493	06/30/2030	06/26/2025 / lwona	06/26/2025 / lwona	W3219

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Environmental Express LTD	B1010 / COD Digestion Vials Low Level 0-150Mg/L	5GE0517	05/31/2030	10/03/2025 / lwona	07/11/2025 / lwona	W3230



Material	BDH9260-500G
Material Description	BDH POTASS HYDRGN PHTHLTE 500G
Grade	ACS GRADE
Batch	24H0956262
Reassay Date	04/28/2026
CAS Number	877-24-7
Molecular Formula	HOCC6H4COOK
Molecular Mass	204.22
Date of Manufacture	04/29/2023
Storage	Room Temperature

Characteristics	Specifications	Measured Values
Appearance	White crystals.	White crystals.
Assay (dried basis)	99.95 - 100.05 %	99.98 %
Chlorine Compounds	<= 0.003 %	<0.003 %
Heavy Metals (as Pb)	<= 5 ppm	<5 ppm
Insoluble Matter	<= 0.005 %	0.003 %
Iron	<= 5 ppm	<5 ppm
pH (0.05M, Water) @25C	4.00 - 4.02	4.00
Sodium	<= 0.005 %	<0.005 %
Sulfur Compounds	<= 0.002 %	<0.002 %

Internal ID #: 322

Signature	Additional Information
We certify that this batch conforms to the specifications listed above. This document has been electronically produced and is valid without a signature. Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA	Analysis may have been rounded to significant digits in specification limits Product meets analytical specifications of the grades listed.

Certificate Of Analysis



Date of Release: 4/8/2025

Name: **Potassium Hydrogen Phthalate**

ACS

Item No: **PX1476 All Sizes**

Lot / Batch No: **2025040493**

Country of Origin: **USA**

Item	Specifications	Analysis
Assay (Dried Basis)	99.95-100.05%	99.98%
Chlorine compounds (as Cl)	0.003% max.	<0.003%
Color	White	Passes Test
Form	Crystals	Passes Test
Heavy metals (by ICP-OES)	5 ppm max.	<5 ppm
Insoluble Matter	0.005% max.	<0.005%
Iron (Fe)	5 ppm max.	<5 ppm
pH of a 0.05m solution @ 25.0C	4.00-4.02	4.00
Sodium (Na)	0.005% max.	<0.005%
Sulfur compounds (as S)	0.002% max.	<0.002%

Joe Schoellkopf

Quality Control Manager

This document has been produced electronically and is valid without a signature .

EMD Millipore is a division of Merck KGaA, Darmstadt, Germany

EMD Millipore Corporation

400 Summit Drive
Burlington, MA 01803
U.S.A.

Form number: 00005624CA, Rev. 2.0

W 3228

W 3229

W 3230

Rec. on 7/11/25 by 12



environmental
express®

2345A Charleston Regional
Charleston, South Carolina 29492
environmentalexpress.com
+1 843.881.6560

May 12, 2025

CERTIFICATE OF ANALYSIS

Environmental Express certifies that the following COD Reagent Vials have been rigorously checked against NIST Traceable standards and also compared for conformance to another major brand name product. Environmental Express COD Vial performance is evaluated using bench top spectrophotometers. Acceptance guidelines are strict and ensure dependable, quality results.

Environmental Express further certifies that the COD products listed below are recognized by the United States Environmental Protection Agency (USEPA) as equivalent to an approved Water Pollutant Testing Procedure for COD (Federal Register, Vol. 45, No. 78, Monday, April 20th, 1980, page 26811) and as such can be used for National Pollution Discharge Elimination System (NPDES) reporting.

<u>Cat. No.</u>	<u>Lot No.</u>	<u>Product Description</u>	<u>Expiration Date</u>
B1010	5GE0517	COD Reagent Vials, 0 - 150 ppm	May-30



SHIPPING DOCUMENTS

23528

Effective Date: 2/12/2025

Page 1 of 1



3310 Win Street Cuyahoga
Falls, Ohio 44223
(330) 253-8211

Analysis Request / Chain of Custody

LAB WO NO.:	For Alliance Technical Group, LLC-Akron use only
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[illegible]

Laboratory Certification

Certified By	License No.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312