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Automated Report

Technical Report for

Civitas

TASMCOA: Brown 22-5

AFE#250465

SGS Job Number: DA74798

Sampling Date: 08/26/25

Report to:

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Total number of pages in report: 84



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

A handwritten signature in black ink, appearing to read "Eric Hoffman".

Eric Hoffman

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Certifications: CO (CO00049), ND (R-027), UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY (8TMS-L) HI (CO00049), NJ (CO011), NV (CO00049), AK (CO00049), CA (3076), and NC (08701)

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Test results relate only to samples analyzed.

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Sample Summary

Civitas

Job No: DA74798

TASMCOA: Brown 22-5
 Project No: AFE#250465

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
DA74798-1	08/26/25	13:20 TC	08/28/25	SO	Soil	WH-B01@6'
DA74798-1A	08/26/25	13:20 TC	08/28/25	SO	Soil	WH-B01@6'
DA74798-1B	08/26/25	13:20 TC	08/28/25	SO	Soil	WH-B01@6'
DA74798-2	08/26/25	13:30 TC	08/28/25	SO	Soil	FL-B01@3'
DA74798-2A	08/26/25	13:30 TC	08/28/25	SO	Soil	FL-B01@3'
DA74798-2B	08/26/25	13:30 TC	08/28/25	SO	Soil	FL-B01@3'
DA74798-3	08/26/25	13:32 TC	08/28/25	SO	Soil	SP-CS01
DA74798-3A	08/26/25	13:32 TC	08/28/25	SO	Soil	SP-CS01
DA74798-3B	08/26/25	13:32 TC	08/28/25	SO	Soil	SP-CS01

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: DA74798
Account: Civitas
Project: TASMCOA: Brown 22-5
Collected: 08/26/25

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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DA74798-1 WH-B01@6'

TPH-ORO (> C28-C36)		10.2	6.7		mg/kg	SW846-8015C
Arsenic		2.0	0.12		mg/kg	SW846 6020B
Barium		121	1.2		mg/kg	SW846 6020B
Cadmium		0.085	0.058		mg/kg	SW846 6020B
Copper		10	1.2		mg/kg	SW846 6020B
Lead		6.8	0.29		mg/kg	SW846 6020B
Nickel		9.4	1.2		mg/kg	SW846 6020B
Selenium		0.68	0.23		mg/kg	SW846 6020B
Zinc		22.3	5.8		mg/kg	SW846 6020B
pH		7.73			su	WREP-125,4E-SATPASTE
Specific Conductivity		2.0	0.0010		mmhos/cm	SM 2510B-2011 MOD

DA74798-1A WH-B01@6'

Calcium		63.2	6.0		mg/l	SW846 6010C
Magnesium		38.2	3.0		mg/l	SW846 6010C
Sodium		300	6.0		mg/l	SW846 6010C
Sodium Adsorption Ratio ^a		7.35			ratio	USDA HANDBOOK 60

DA74798-1B WH-B01@6'

Boron		0.504	0.25		mg/l	SW846 6010C
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DA74798-2 FL-B01@3'

TPH-DRO (C10-C28)		13.0	4.4		mg/kg	SW846-8015C
TPH-ORO (> C28-C36)		36.1	6.5		mg/kg	SW846-8015C
Arsenic		6.0	0.12		mg/kg	SW846 6020B
Barium		181	1.2		mg/kg	SW846 6020B
Cadmium		0.37	0.061		mg/kg	SW846 6020B
Copper		16.1	1.2		mg/kg	SW846 6020B
Lead		16.0	0.31		mg/kg	SW846 6020B
Nickel		15.7	1.2		mg/kg	SW846 6020B
Selenium		0.25	0.25		mg/kg	SW846 6020B
Silver		0.064	0.061		mg/kg	SW846 6020B
Zinc		53.2	6.1		mg/kg	SW846 6020B
pH		7.87			su	WREP-125,4E-SATPASTE
Specific Conductivity		0.84	0.0010		mmhos/cm	SM 2510B-2011 MOD

DA74798-2A FL-B01@3'

Calcium		29.4	6.0		mg/l	SW846 6010C
Magnesium		24.1	3.0		mg/l	SW846 6010C

Summary of Hits

Job Number: DA74798
Account: Civitas
Project: TASMCOA: Brown 22-5
Collected: 08/26/25

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Sodium		115	6.0		mg/l	SW846 6010C
Sodium Adsorption Ratio ^a		3.81			ratio	USDA HANDBOOK 60
DA74798-2B		FL-B01@3'				
Boron		0.311	0.25		mg/l	SW846 6010C
DA74798-3		SP-CS01				
TPH-DRO (C10-C28)		4.88	4.2		mg/kg	SW846-8015C
TPH-ORO (> C28-C36)		16.2	6.3		mg/kg	SW846-8015C
Arsenic		4.8	0.12		mg/kg	SW846 6020B
Barium		141	1.2		mg/kg	SW846 6020B
Cadmium		0.27	0.059		mg/kg	SW846 6020B
Copper		18.3	1.2		mg/kg	SW846 6020B
Lead		28.7	0.30		mg/kg	SW846 6020B
Nickel		15.2	1.2		mg/kg	SW846 6020B
Selenium		0.28	0.24		mg/kg	SW846 6020B
Silver		0.077	0.059		mg/kg	SW846 6020B
Zinc		50.9	5.9		mg/kg	SW846 6020B
pH		7.67			su	WREP-125,4E-SATPASTE
Specific Conductivity		0.81	0.0010		mmhos/cm	SM 2510B-2011 MOD
DA74798-3A		SP-CS01				
Calcium		63.5	6.0		mg/l	SW846 6010C
Magnesium		28.3	3.0		mg/l	SW846 6010C
Sodium		55.9	6.0		mg/l	SW846 6010C
Sodium Adsorption Ratio ^a		1.47			ratio	USDA HANDBOOK 60
DA74798-3B		SP-CS01				
Boron		0.279	0.25		mg/l	SW846 6010C

(a) Calculated as: $(Na \text{ meq/L}) / \sqrt{[(Ca \text{ meq/L}) + (Mg \text{ meq/L})/2]}$

Sample Results

Report of Analysis

Report of Analysis

3.1
3

Client Sample ID: WH-B01@6'	
Lab Sample ID: DA74798-1	Date Sampled: 08/26/25
Matrix: SO - Soil	Date Received: 08/28/25
Method: SW846 8260D	Percent Solids: 87.1
Project: TASMCOA: Brown 22-5	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V93816.D	1	08/31/25 09:39	MB	n/a	n/a	V5V4482
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.07 g	5.0 ml
Run #2		

VOA COGCC Table 915 soil list

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	< 0.0011	0.0011	mg/kg	
100-41-4	Ethylbenzene	< 0.0023	0.0023	mg/kg	
108-88-3	Toluene	< 0.0023	0.0023	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	< 0.0023	0.0023	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	< 0.0023	0.0023	mg/kg	
	m,p-Xylene	< 0.0023	0.0023	mg/kg	
95-47-6	o-Xylene	< 0.0023	0.0023	mg/kg	
1330-20-7	Xylene (total)	< 0.0023	0.0023	mg/kg	
	TPH-GRO (C6-C10)	< 0.23	0.23	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-130%
2037-26-5	Toluene-D8	84%		70-130%
460-00-4	4-Bromofluorobenzene	84%		70-130%
17060-07-0	1,2-Dichloroethane-D4	99%		70-130%

RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: WH-B01@6'	
Lab Sample ID: DA74798-1	Date Sampled: 08/26/25
Matrix: SO - Soil	Date Received: 08/28/25
Method: SW846 8270E SW846 3570	Percent Solids: 87.1
Project: TASMCOA: Brown 22-5	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G20440.D	1	08/31/25 23:25	TH	08/30/25 15:30	OP28434	E6G765
Run #2							

Run #	Initial Weight	Final Volume
Run #1	4.9 g	10.0 ml
Run #2		

COGCC Table 915-1 PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	< 0.0047	0.0047	mg/kg	
120-12-7	Anthracene	< 0.0047	0.0047	mg/kg	
56-55-3	Benzo(a)anthracene	< 0.0059	0.0059	mg/kg	
205-99-2	Benzo(b)fluoranthene	< 0.0047	0.0047	mg/kg	
207-08-9	Benzo(k)fluoranthene	< 0.0047	0.0047	mg/kg	
50-32-8	Benzo(a)pyrene	< 0.0047	0.0047	mg/kg	
218-01-9	Chrysene	< 0.0047	0.0047	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	< 0.0047	0.0047	mg/kg	
206-44-0	Fluoranthene	< 0.0047	0.0047	mg/kg	
86-73-7	Fluorene	< 0.0047	0.0047	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.0047	0.0047	mg/kg	
90-12-0	1-Methylnaphthalene	< 0.0047	0.0047	mg/kg	
91-57-6	2-Methylnaphthalene	< 0.0047	0.0047	mg/kg	
91-20-3	Naphthalene	< 0.0023	0.0023	mg/kg	
129-00-0	Pyrene	< 0.0047	0.0047	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	57%		10-130%
4165-60-0	Nitrobenzene-d5	76%		10-130%
1718-51-0	Terphenyl-d14	84%		10-130%

RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: WH-B01@6'	
Lab Sample ID: DA74798-1	Date Sampled: 08/26/25
Matrix: SO - Soil	Date Received: 08/28/25
Method: SW846-8015C SW846 3570	Percent Solids: 87.1
Project: TASMCOA: Brown 22-5	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LW47225.D	1	09/04/25 11:52	JB	08/29/25 10:30	OP28427	GLW1106
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.1 g	10.0 ml
Run #2		

DRO C10-C28, ORO > C28-C36

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	< 4.5	4.5	mg/kg	
	TPH-ORO (> C28-C36)	10.2	6.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		20-142%

RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: WH-B01@6'	Date Sampled: 08/26/25
Lab Sample ID: DA74798-1	Date Received: 08/28/25
Matrix: SO - Soil	Percent Solids: 87.1
Project: TASMCOA: Brown 22-5	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	2.0	0.12	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Barium	121	1.2	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Cadmium	0.085	0.058	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Copper	10	1.2	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Lead	6.8	0.29	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Nickel	9.4	1.2	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Selenium	0.68	0.23	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Silver	< 0.058	0.058	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Zinc	22.3	5.8	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA19620

(2) Prep QC Batch: MP42641

RL = Reporting Limit

Report of Analysis

Client Sample ID: WH-B01@6'	Date Sampled: 08/26/25
Lab Sample ID: DA74798-1	Date Received: 08/28/25
Matrix: SO - Soil	Percent Solids: 87.1
Project: TASMCOA: Brown 22-5	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	87.1		%	1	08/29/25	SS	SM2540G-2011 M
pH-saturated paste method							
pH	7.73		su	1	09/08/25 12:39	SN	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity	2.0	0.0010	mmhos/cm	1	09/08/25 13:00	SN	SM 2510B-2011 MOD
Chromium, Hexavalent ^a	< 0.46	0.46	mg/kg	1	09/13/25 12:56	ANJ	SW846 3060A/7199

(a) Analysis performed at SGS Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID: WH-B01@6'	Date Sampled: 08/26/25
Lab Sample ID: DA74798-1A	Date Received: 08/28/25
Matrix: SO - Soil	Percent Solids: 87.1
Project: TASMCOA: Brown 22-5	

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	63.2	6.0	mg/l	1	09/03/25	09/05/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium	38.2	3.0	mg/l	1	09/03/25	09/05/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium	300	6.0	mg/l	1	09/03/25	09/05/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: MA19572

(2) Prep QC Batch: MP42707

RL = Reporting Limit

Report of Analysis

Client Sample ID: WH-B01@6'	
Lab Sample ID: DA74798-1A	Date Sampled: 08/26/25
Matrix: SO - Soil	Date Received: 08/28/25
	Percent Solids: 87.1
Project: TASMCOA: Brown 22-5	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	7.35		ratio	1	09/05/25 00:26	BR	USDA HANDBOOK 60

(a) Calculated as: $(Na \text{ meq/L}) / \sqrt{[(Ca \text{ meq/L}) + (Mg \text{ meq/L})/2]}$

RL = Reporting Limit

Report of Analysis

Client Sample ID: WH-B01@6'	
Lab Sample ID: DA74798-1B	Date Sampled: 08/26/25
Matrix: SO - Soil	Date Received: 08/28/25
	Percent Solids: 87.1
Project: TASMCOA: Brown 22-5	

Hot Water Soluble Boron Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Boron	0.504	0.25	mg/l	1	08/29/25	09/04/25 BR	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19573

(2) Prep QC Batch: MP42652

RL = Reporting Limit

Report of Analysis

Client Sample ID: FL-B01@3'	
Lab Sample ID: DA74798-2	Date Sampled: 08/26/25
Matrix: SO - Soil	Date Received: 08/28/25
Method: SW846 8260D	Percent Solids: 88.4
Project: TASMCOA: Brown 22-5	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4V38459.D	1	08/31/25 03:15	MB	n/a	n/a	V4V1914
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.24 g	5.0 ml
Run #2		

VOA COGCC Table 915 soil list

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	< 0.0011	0.0011	mg/kg	
100-41-4	Ethylbenzene	< 0.0022	0.0022	mg/kg	
108-88-3	Toluene	< 0.0022	0.0022	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	< 0.0022	0.0022	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	< 0.0022	0.0022	mg/kg	
	m,p-Xylene	< 0.0022	0.0022	mg/kg	
95-47-6	o-Xylene	< 0.0022	0.0022	mg/kg	
1330-20-7	Xylene (total)	< 0.0022	0.0022	mg/kg	
	TPH-GRO (C6-C10)	< 0.22	0.22	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	122%		70-130%
2037-26-5	Toluene-D8	92%		70-130%
460-00-4	4-Bromofluorobenzene	97%		70-130%
17060-07-0	1,2-Dichloroethane-D4	111%		70-130%

RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: FL-B01@3'		
Lab Sample ID: DA74798-2		Date Sampled: 08/26/25
Matrix: SO - Soil		Date Received: 08/28/25
Method: SW846 8270E SW846 3570		Percent Solids: 88.4
Project: TASMCOA: Brown 22-5		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G20441.D	1	08/31/25 23:49	TH	08/30/25 15:30	OP28434	E6G765
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.2 g	10.0 ml
Run #2		

COGCC Table 915-1 PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	< 0.0044	0.0044	mg/kg	
120-12-7	Anthracene	< 0.0044	0.0044	mg/kg	
56-55-3	Benzo(a)anthracene	< 0.0054	0.0054	mg/kg	
205-99-2	Benzo(b)fluoranthene	< 0.0044	0.0044	mg/kg	
207-08-9	Benzo(k)fluoranthene	< 0.0044	0.0044	mg/kg	
50-32-8	Benzo(a)pyrene	< 0.0044	0.0044	mg/kg	
218-01-9	Chrysene	< 0.0044	0.0044	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	< 0.0044	0.0044	mg/kg	
206-44-0	Fluoranthene	< 0.0044	0.0044	mg/kg	
86-73-7	Fluorene	< 0.0044	0.0044	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.0044	0.0044	mg/kg	
90-12-0	1-Methylnaphthalene	< 0.0044	0.0044	mg/kg	
91-57-6	2-Methylnaphthalene	< 0.0044	0.0044	mg/kg	
91-20-3	Naphthalene	< 0.0022	0.0022	mg/kg	
129-00-0	Pyrene	< 0.0044	0.0044	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	69%		10-130%
4165-60-0	Nitrobenzene-d5	87%		10-130%
1718-51-0	Terphenyl-d14	87%		10-130%

RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: FL-B01@3'	
Lab Sample ID: DA74798-2	Date Sampled: 08/26/25
Matrix: SO - Soil	Date Received: 08/28/25
Method: SW846-8015C SW846 3570	Percent Solids: 88.4
Project: TASMCOA: Brown 22-5	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LW47226.D	1	09/04/25 12:04	JB	08/29/25 10:30	OP28427	GLW1106
Run #2							

	Initial Weight	Final Volume
Run #1	5.2 g	10.0 ml
Run #2		

DRO C10-C28, ORO > C28-C36

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	13.0	4.4	mg/kg	
	TPH-ORO (> C28-C36)	36.1	6.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		20-142%

RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: FL-B01@3'	Date Sampled: 08/26/25
Lab Sample ID: DA74798-2	Date Received: 08/28/25
Matrix: SO - Soil	Percent Solids: 88.4
Project: TASMCOA: Brown 22-5	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	6.0	0.12	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Barium	181	1.2	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Cadmium	0.37	0.061	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Copper	16.1	1.2	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Lead	16.0	0.31	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Nickel	15.7	1.2	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Selenium	0.25	0.25	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Silver	0.064	0.061	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Zinc	53.2	6.1	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA19620

(2) Prep QC Batch: MP42641

RL = Reporting Limit

Report of Analysis

Client Sample ID: FL-B01@3'	Date Sampled: 08/26/25
Lab Sample ID: DA74798-2	Date Received: 08/28/25
Matrix: SO - Soil	Percent Solids: 88.4
Project: TASMCOA: Brown 22-5	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	88.4		%	1	08/29/25	SS	SM2540G-2011 M
pH-saturated paste method							
pH	7.87		su	1	09/08/25 12:39	SN	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity	0.84	0.0010	mmhos/cm	1	09/08/25 13:00	SN	SM 2510B-2011 MOD
Chromium, Hexavalent ^a	< 0.46	0.46	mg/kg	1	09/13/25 09:53	ANJ	SW846 3060A/7199

(a) Analysis performed at SGS Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID: FL-B01@3'	Date Sampled: 08/26/25
Lab Sample ID: DA74798-2A	Date Received: 08/28/25
Matrix: SO - Soil	Percent Solids: 88.4
Project: TASMCOA: Brown 22-5	

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	29.4	6.0	mg/l	1	09/03/25	09/05/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium	24.1	3.0	mg/l	1	09/03/25	09/05/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium	115	6.0	mg/l	1	09/03/25	09/05/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: MA19572

(2) Prep QC Batch: MP42707

RL = Reporting Limit

Report of Analysis

Client Sample ID: FL-B01@3'	Date Sampled: 08/26/25
Lab Sample ID: DA74798-2A	Date Received: 08/28/25
Matrix: SO - Soil	Percent Solids: 88.4
Project: TASMCOA: Brown 22-5	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	3.81		ratio	1	09/05/25 00:29	BR	USDA HANDBOOK 60

(a) Calculated as: $(Na \text{ meq/L}) / \sqrt{[(Ca \text{ meq/L}) + (Mg \text{ meq/L})/2]}$

RL = Reporting Limit

Report of Analysis

Client Sample ID: FL-B01@3'	Date Sampled: 08/26/25
Lab Sample ID: DA74798-2B	Date Received: 08/28/25
Matrix: SO - Soil	Percent Solids: 88.4
Project: TASMCOA: Brown 22-5	

Hot Water Soluble Boron Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Boron	0.311	0.25	mg/l	1	08/29/25	09/04/25 BR	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19573

(2) Prep QC Batch: MP42652

RL = Reporting Limit

Report of Analysis

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Client Sample ID: SP-CS01	
Lab Sample ID: DA74798-3	Date Sampled: 08/26/25
Matrix: SO - Soil	Date Received: 08/28/25
Method: SW846 8260D	Percent Solids: 89.8
Project: TASMCOA: Brown 22-5	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V93817.D	1	08/31/25 10:04	MB	n/a	n/a	V5V4482
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.38 g	5.0 ml
Run #2		

VOA COGCC Table 915 soil list

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	< 0.0010	0.0010	mg/kg	
100-41-4	Ethylbenzene	< 0.0021	0.0021	mg/kg	
108-88-3	Toluene	< 0.0021	0.0021	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	< 0.0021	0.0021	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	< 0.0021	0.0021	mg/kg	
	m,p-Xylene	< 0.0021	0.0021	mg/kg	
95-47-6	o-Xylene	< 0.0021	0.0021	mg/kg	
1330-20-7	Xylene (total)	< 0.0021	0.0021	mg/kg	
	TPH-GRO (C6-C10)	< 0.21	0.21	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	87%		70-130%
460-00-4	4-Bromofluorobenzene	89%		70-130%
17060-07-0	1,2-Dichloroethane-D4	102%		70-130%

RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SP-CS01	Date Sampled: 08/26/25
Lab Sample ID: DA74798-3	Date Received: 08/28/25
Matrix: SO - Soil	Percent Solids: 89.8
Method: SW846 8270E SW846 3570	
Project: TASMCOA: Brown 22-5	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G20442.D	1	09/01/25 00:12	TH	08/30/25 15:30	OP28434	E6G765
Run #2							

Run #	Initial Weight	Final Volume
Run #1	4.9 g	10.0 ml
Run #2		

COGCC Table 915-1 PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	< 0.0045	0.0045	mg/kg	
120-12-7	Anthracene	< 0.0045	0.0045	mg/kg	
56-55-3	Benzo(a)anthracene	< 0.0057	0.0057	mg/kg	
205-99-2	Benzo(b)fluoranthene	< 0.0045	0.0045	mg/kg	
207-08-9	Benzo(k)fluoranthene	< 0.0045	0.0045	mg/kg	
50-32-8	Benzo(a)pyrene	< 0.0045	0.0045	mg/kg	
218-01-9	Chrysene	< 0.0045	0.0045	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	< 0.0045	0.0045	mg/kg	
206-44-0	Fluoranthene	< 0.0045	0.0045	mg/kg	
86-73-7	Fluorene	< 0.0045	0.0045	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.0045	0.0045	mg/kg	
90-12-0	1-Methylnaphthalene	< 0.0045	0.0045	mg/kg	
91-57-6	2-Methylnaphthalene	< 0.0045	0.0045	mg/kg	
91-20-3	Naphthalene	< 0.0023	0.0023	mg/kg	
129-00-0	Pyrene	< 0.0045	0.0045	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	69%		10-130%
4165-60-0	Nitrobenzene-d5	79%		10-130%
1718-51-0	Terphenyl-d14	89%		10-130%

RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SP-CS01	Date Sampled: 08/26/25
Lab Sample ID: DA74798-3	Date Received: 08/28/25
Matrix: SO - Soil	Percent Solids: 89.8
Method: SW846-8015C SW846 3570	
Project: TASMCOA: Brown 22-5	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LW47227.D	1	09/04/25 12:16	JB	08/29/25 10:30	OP28427	GLW1106
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.3 g	10.0 ml
Run #2		

DRO C10-C28, ORO > C28-C36

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	4.88	4.2	mg/kg	
	TPH-ORO (> C28-C36)	16.2	6.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	105%		20-142%

RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SP-CS01	Date Sampled: 08/26/25
Lab Sample ID: DA74798-3	Date Received: 08/28/25
Matrix: SO - Soil	Percent Solids: 89.8
Project: TASMCOA: Brown 22-5	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	4.8	0.12	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Barium	141	1.2	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Cadmium	0.27	0.059	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Copper	18.3	1.2	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Lead	28.7	0.30	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Nickel	15.2	1.2	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Selenium	0.28	0.24	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Silver	0.077	0.059	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²
Zinc	50.9	5.9	mg/kg	5	08/29/25	09/02/25	CDL SW846 6020B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA19620

(2) Prep QC Batch: MP42641

RL = Reporting Limit

Report of Analysis

Client Sample ID: SP-CS01	Date Sampled: 08/26/25
Lab Sample ID: DA74798-3	Date Received: 08/28/25
Matrix: SO - Soil	Percent Solids: 89.8
Project: TASMCOA: Brown 22-5	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	89.8		%	1	08/29/25	SS	SM2540G-2011 M
pH-saturated paste method							
pH	7.67		su	1	09/08/25 12:39	SN	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity	0.81	0.0010	mmhos/cm	1	09/08/25 13:00	SN	SM 2510B-2011 MOD
Chromium, Hexavalent ^a	< 0.44	0.44	mg/kg	1	09/13/25 13:04	ANJ	SW846 3060A/7199

(a) Analysis performed at SGS Dayton, NJ.

RL = Reporting Limit

Report of Analysis



Client Sample ID: SP-CS01	Date Sampled: 08/26/25
Lab Sample ID: DA74798-3A	Date Received: 08/28/25
Matrix: SO - Soil	Percent Solids: 89.8
Project: TASMCOA: Brown 22-5	

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	63.5	6.0	mg/l	1	09/03/25	09/05/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium	28.3	3.0	mg/l	1	09/03/25	09/05/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium	55.9	6.0	mg/l	1	09/03/25	09/05/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: MA19572

(2) Prep QC Batch: MP42707

RL = Reporting Limit

Report of Analysis

Client Sample ID: SP-CS01	Date Sampled: 08/26/25
Lab Sample ID: DA74798-3A	Date Received: 08/28/25
Matrix: SO - Soil	Percent Solids: 89.8
Project: TASMCOA: Brown 22-5	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	1.47		ratio	1	09/05/25 00:32	BR	USDA HANDBOOK 60

(a) Calculated as: $(Na \text{ meq/L}) / \sqrt{[(Ca \text{ meq/L}) + (Mg \text{ meq/L})/2]}$

RL = Reporting Limit

Report of Analysis

Client Sample ID: SP-CS01	Date Sampled: 08/26/25
Lab Sample ID: DA74798-3B	Date Received: 08/28/25
Matrix: SO - Soil	Percent Solids: 89.8
Project: TASMCOA: Brown 22-5	

Hot Water Soluble Boron Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Boron	0.279	0.25	mg/l	1	08/29/25	09/04/25 BR	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19573

(2) Prep QC Batch: MP42652

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4V1914-MB	4V38457.D	1	08/31/25	MB	n/a	n/a	V4V1914

The QC reported here applies to the following samples:

Method: SW846 8260D

DA74798-2

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	ug/kg	
108-88-3	Toluene	ND	2.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	ug/kg	
	m,p-Xylene	ND	2.0	ug/kg	
95-47-6	o-Xylene	ND	2.0	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	ug/kg	
	TPH-GRO (C6-C10)	ND	200	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	117%	70-130%
2037-26-5	Toluene-D8	89%	70-130%
460-00-4	4-Bromofluorobenzene	89%	70-130%
17060-07-0	1,2-Dichloroethane-D4	110%	70-130%

Method Blank Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V4482-MB	5V93801.D	1	08/31/25	MB	n/a	n/a	V5V4482

The QC reported here applies to the following samples:

Method: SW846 8260D

DA74798-1, DA74798-3

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	ug/kg	
108-88-3	Toluene	ND	2.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	ug/kg	
	m,p-Xylene	ND	2.0	ug/kg	
95-47-6	o-Xylene	ND	2.0	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	ug/kg	
	TPH-GRO (C6-C10)	ND	200	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	92%	70-130%
2037-26-5	Toluene-D8	89%	70-130%
460-00-4	4-Bromofluorobenzene	86%	70-130%
17060-07-0	1,2-Dichloroethane-D4	97%	70-130%

Blank Spike Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4V1914-BS	4V38455.D	1	08/31/25	MB	n/a	n/a	V4V1914

The QC reported here applies to the following samples:

Method: SW846 8260D

DA74798-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	61.1	122	70-130
100-41-4	Ethylbenzene	50	52.4	105	70-130
108-88-3	Toluene	50	53.9	108	70-130
95-63-6	1,2,4-Trimethylbenzene	50	48.5	97	70-130
108-67-8	1,3,5-Trimethylbenzene	50	47.6	95	70-130
	m,p-Xylene	100	106	106	70-130
95-47-6	o-Xylene	50	57.7	115	70-130
1330-20-7	Xylene (total)	150	164	109	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	117%	70-130%
2037-26-5	Toluene-D8	95%	70-130%
460-00-4	4-Bromofluorobenzene	107%	70-130%
17060-07-0	1,2-Dichloroethane-D4	109%	70-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4V1914-BS	4V38456.D	1	08/31/25	MB	n/a	n/a	V4V1914

The QC reported here applies to the following samples:

Method: SW846 8260D

DA74798-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
	TPH-GRO (C6-C10)	2000	2410	121	50-200

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	112%	70-130%
2037-26-5	Toluene-D8	91%	70-130%
460-00-4	4-Bromofluorobenzene	89%	70-130%
17060-07-0	1,2-Dichloroethane-D4	105%	70-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V4482-BS	5V93799.D	1	08/31/25	MB	n/a	n/a	V5V4482

The QC reported here applies to the following samples:

Method: SW846 8260D

DA74798-1, DA74798-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	48.0	96	70-130
100-41-4	Ethylbenzene	50	46.2	92	70-130
108-88-3	Toluene	50	49.4	99	70-130
95-63-6	1,2,4-Trimethylbenzene	50	44.5	89	70-130
108-67-8	1,3,5-Trimethylbenzene	50	44.8	90	70-130
	m,p-Xylene	100	88.3	88	70-130
95-47-6	o-Xylene	50	49.1	98	70-130
1330-20-7	Xylene (total)	150	137	91	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	88%	70-130%
2037-26-5	Toluene-D8	93%	70-130%
460-00-4	4-Bromofluorobenzene	87%	70-130%
17060-07-0	1,2-Dichloroethane-D4	92%	70-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V4482-BS	5V93800.D	1	08/31/25	MB	n/a	n/a	V5V4482

The QC reported here applies to the following samples:

Method: SW846 8260D

DA74798-1, DA74798-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
	TPH-GRO (C6-C10)	2000	1630	82	50-200

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	84%	70-130%
2037-26-5	Toluene-D8	93%	70-130%
460-00-4	4-Bromofluorobenzene	88%	70-130%
17060-07-0	1,2-Dichloroethane-D4	96%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA74796-2MS	4V38460.D	1	08/31/25	MB	n/a	n/a	V4V1914
DA74796-2MSD	4V38461.D	1	08/31/25	MB	n/a	n/a	V4V1914
DA74796-2	4V38458.D	1	08/31/25	MB	n/a	n/a	V4V1914

The QC reported here applies to the following samples:

Method: SW846 8260D

DA74798-2

CAS No.	Compound	DA74796-2 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	< 1.1	52.9	59.3	112	53.5	59.4	111	0	43-130/30
100-41-4	Ethylbenzene	< 2.2	52.9	51.3	97	53.5	50.8	95	1	15-145/30
108-88-3	Toluene	< 2.2	52.9	52.1	98	53.5	50.4	94	3	37-130/30
95-63-6	1,2,4-Trimethylbenzene	< 2.2	52.9	45.8	87	53.5	46.2	86	1	5-177/30
108-67-8	1,3,5-Trimethylbenzene	< 2.2	52.9	48.7	92	53.5	49.3	92	1	6-159/30
	m,p-Xylene	< 2.2	106	100	95	107	96.6	90	3	21-142/30
95-47-6	o-Xylene	< 2.2	52.9	57.4	109	53.5	59.2	111	3	25-140/30
1330-20-7	Xylene (total)	< 2.2	159	157	99	161	156	97	1	17-142/30

CAS No.	Surrogate Recoveries	MS	MSD	DA74796-2	Limits
1868-53-7	Dibromofluoromethane	122%	121%	120%	70-130%
2037-26-5	Toluene-D8	93%	92%	88%	70-130%
460-00-4	4-Bromofluorobenzene	103%	101%	88%	70-130%
17060-07-0	1,2-Dichloroethane-D4	108%	109%	111%	70-130%

* = Outside of Control Limits.

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA74798-2MS	4V38462.D	1	08/31/25	MB	n/a	n/a	V4V1914
DA74798-2MSD	4V38463.D	1	08/31/25	MB	n/a	n/a	V4V1914
DA74798-2	4V38459.D	1	08/31/25	MB	n/a	n/a	V4V1914

The QC reported here applies to the following samples:

Method: SW846 8260D

DA74798-2

CAS No.	Compound	DA74798-2 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	< 220	2220	1880	85	2140	1760	82	7	5-200/30

CAS No.	Surrogate Recoveries	MS	MSD	DA74798-2	Limits
1868-53-7	Dibromofluoromethane	123%	117%	122%	70-130%
2037-26-5	Toluene-D8	90%	93%	92%	70-130%
460-00-4	4-Bromofluorobenzene	93%	96%	97%	70-130%
17060-07-0	1,2-Dichloroethane-D4	113%	105%	111%	70-130%

* = Outside of Control Limits.

5.3.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA74798
Account: CIVITCOV Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA74754-1MS	5V93804.D	1	08/31/25	MB	n/a	n/a	V5V4482
DA74754-1MSD	5V93805.D	1	08/31/25	MB	n/a	n/a	V5V4482
DA74754-1	5V93802.D	1	08/31/25	MB	n/a	n/a	V5V4482

The QC reported here applies to the following samples:

Method: SW846 8260D

DA74798-1, DA74798-3

CAS No.	Compound	DA74754-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	< 1.0	48.5	39.8	82	48.7	36.1	74	10	43-130/30
100-41-4	Ethylbenzene	< 2.1	48.5	37.7	78	48.7	33.7	69	11	15-145/30
108-88-3	Toluene	< 2.1	48.5	38.5	79	48.7	34.2	70	12	37-130/30
95-63-6	1,2,4-Trimethylbenzene	< 2.1	48.5	33.1	68	48.7	29.7	61	11	5-177/30
108-67-8	1,3,5-Trimethylbenzene	< 2.1	48.5	34.8	72	48.7	32.0	66	8	6-159/30
	m,p-Xylene	< 2.1	97	70.0	72	97.3	62.4	64	11	21-142/30
95-47-6	o-Xylene	< 2.1	48.5	38.6	80	48.7	35.2	72	9	25-140/30
1330-20-7	Xylene (total)	< 2.1	145	109	75	146	97.6	67	11	17-142/30

CAS No.	Surrogate Recoveries	MS	MSD	DA74754-1	Limits
1868-53-7	Dibromofluoromethane	91%	92%	91%	70-130%
2037-26-5	Toluene-D8	90%	90%	89%	70-130%
460-00-4	4-Bromofluorobenzene	86%	87%	87%	70-130%
17060-07-0	1,2-Dichloroethane-D4	93%	93%	96%	70-130%

* = Outside of Control Limits.

5.3.3
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA74754-3MS	5V93806.D	1	08/31/25	MB	n/a	n/a	V5V4482
DA74754-3MSD	5V93807.D	1	08/31/25	MB	n/a	n/a	V5V4482
DA74754-3	5V93803.D	1	08/31/25	MB	n/a	n/a	V5V4482

The QC reported here applies to the following samples:

Method: SW846 8260D

DA74798-1, DA74798-3

CAS No.	Compound	DA74754-3 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	< 200	2060	1160	56	2010	986	49	16	5-200/30

CAS No.	Surrogate Recoveries	MS	MSD	DA74754-3	Limits
1868-53-7	Dibromofluoromethane	92%	89%	90%	70-130%
2037-26-5	Toluene-D8	90%	87%	89%	70-130%
460-00-4	4-Bromofluorobenzene	86%	85%	87%	70-130%
17060-07-0	1,2-Dichloroethane-D4	97%	95%	96%	70-130%

* = Outside of Control Limits.

5.3.4
5

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP28434-MB	6G20423.D	1	08/31/25	TH	08/30/25	OP28434	E6G765

The QC reported here applies to the following samples:

Method: SW846 8270E

DA74798-1, DA74798-2, DA74798-3

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	4.0	ug/kg	
120-12-7	Anthracene	ND	4.0	ug/kg	
56-55-3	Benzo(a)anthracene	ND	5.0	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	4.0	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	4.0	ug/kg	
50-32-8	Benzo(a)pyrene	ND	4.0	ug/kg	
218-01-9	Chrysene	ND	4.0	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	ug/kg	
206-44-0	Fluoranthene	ND	4.0	ug/kg	
86-73-7	Fluorene	ND	4.0	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	ug/kg	
90-12-0	1-Methylnaphthalene	ND	4.0	ug/kg	
91-57-6	2-Methylnaphthalene	ND	4.0	ug/kg	
91-20-3	Naphthalene	ND	2.0	ug/kg	
129-00-0	Pyrene	ND	4.0	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
321-60-8	2-Fluorobiphenyl	55%	10-130%
4165-60-0	Nitrobenzene-d5	31%	10-130%
1718-51-0	Terphenyl-d14	105%	10-130%

Blank Spike Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP28434-BS	6G20424.D	1	08/31/25	TH	08/30/25	OP28434	E6G765

The QC reported here applies to the following samples:

Method: SW846 8270E

DA74798-1, DA74798-2, DA74798-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	200	236	118	31-130
120-12-7	Anthracene	200	237	119	46-134
56-55-3	Benzo(a)anthracene	200	233	117	52-135
205-99-2	Benzo(b)fluoranthene	200	272	136	50-136
207-08-9	Benzo(k)fluoranthene	200	265	133	52-134
50-32-8	Benzo(a)pyrene	200	274	137* a	50-130
218-01-9	Chrysene	200	255	128	51-131
53-70-3	Dibenzo(a,h)anthracene	200	285	143* a	49-136
206-44-0	Fluoranthene	200	254	127	51-137
86-73-7	Fluorene	200	237	119	38-130
193-39-5	Indeno(1,2,3-cd)pyrene	200	285	143* a	50-139
90-12-0	1-Methylnaphthalene	200	236	118	18-130
91-57-6	2-Methylnaphthalene	200	219	110	16-130
91-20-3	Naphthalene	200	202	101	5-130
129-00-0	Pyrene	200	232	116	48-136

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	94%	10-130%
4165-60-0	Nitrobenzene-d5	95%	10-130%
1718-51-0	Terphenyl-d14	117%	10-130%

(a) Outside control limits biased high. Sample result is non-detect.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP28434-MS	6G20425.D	1	08/31/25	TH	08/30/25	OP28434	E6G765
OP28434-MSD	6G20426.D	1	08/31/25	TH	08/30/25	OP28434	E6G765
DA74746-5	6G20444.D	1	09/01/25	TH	08/30/25	OP28434	E6G765

The QC reported here applies to the following samples:

Method: SW846 8270E

DA74798-1, DA74798-2, DA74798-3

CAS No.	Compound	DA74746-5 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	< 4.1	207	197	95	203	212	104	7	12-130/52
120-12-7	Anthracene	< 4.1	207	204	98	203	213	105	4	31-130/60
56-55-3	Benzo(a)anthracene	< 5.2	207	199	96	203	206	101	3	34-130/60
205-99-2	Benzo(b)fluoranthene	< 4.1	207	219	106	203	231	114	5	10-168/60
207-08-9	Benzo(k)fluoranthene	< 4.1	207	220	106	203	223	110	1	30-130/60
50-32-8	Benzo(a)pyrene	< 4.1	207	224	108	203	234	115	4	10-179/60
218-01-9	Chrysene	< 4.1	207	226	109	203	227	112	0	34-130/60
53-70-3	Dibenzo(a,h)anthracene	< 4.1	207	239	115	203	249	123	4	20-138/60
206-44-0	Fluoranthene	< 4.1	207	211	102	203	217	107	3	32-130/60
86-73-7	Fluorene	< 4.1	207	203	98	203	221	109	8	20-130/60
193-39-5	Indeno(1,2,3-cd)pyrene	< 4.1	207	230	111	203	232	114	1	17-148/60
90-12-0	1-Methylnaphthalene	< 4.1	207	197	95	203	226	111	14	10-130/41
91-57-6	2-Methylnaphthalene	< 4.1	207	184	89	203	209	103	13	14-130/40
91-20-3	Naphthalene	< 2.1	207	176	85	203	189	93	7	10-130/40
129-00-0	Pyrene	< 4.1	207	199	96	203	203	100	2	31-130/60

CAS No.	Surrogate Recoveries	MS	MSD	DA74746-5	Limits
321-60-8	2-Fluorobiphenyl	91%	90%	76%	10-130%
4165-60-0	Nitrobenzene-d5	104%	100%	90%	10-130%
1718-51-0	Terphenyl-d14	116%	116%	94%	10-130%

* = Outside of Control Limits.

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP28427-MB	LW47208.D	1	09/04/25	JB	08/29/25	OP28427	GLW1106

The QC reported here applies to the following samples:

Method: SW846-8015C

DA74798-1, DA74798-2, DA74798-3

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	ND	4.0	mg/kg	
	TPH-ORO (> C28-C36)	ND	6.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	93% 20-142%

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Blank Spike Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP28427-BS	LW47209.D	1	09/04/25	JB	08/29/25	OP28427	GLW1106

The QC reported here applies to the following samples:

Method: SW846-8015C

DA74798-1, DA74798-2, DA74798-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	200	202	101	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	100%	20-142%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP28427-BS2	LW47210.D	1	09/04/25	JB	08/29/25	OP28427	GLW1106

The QC reported here applies to the following samples:

Method: SW846-8015C

DA74798-1, DA74798-2, DA74798-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-ORO (> C28-C36)	200	216	108	70-138

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	92%	20-142%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP28427-MS1	LW47211.D	1	09/04/25	JB	08/29/25	OP28427	GLW1106
OP28427-MSD1	LW47212.D	1	09/04/25	JB	08/29/25	OP28427	GLW1106
DA74796-2	LW47215.D	1	09/04/25	JB	08/29/25	OP28427	GLW1106

The QC reported here applies to the following samples:

Method: SW846-8015C

DA74798-1, DA74798-2, DA74798-3

CAS No.	Compound	DA74796-2 mg/kg	Spike Q mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	< 4.3	217	206	95	220	219	100	6	59-130/30

CAS No.	Surrogate Recoveries	MS	MSD	DA74796-2	Limits
84-15-1	o-Terphenyl	104%	99%	90%	20-142%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA74798
Account: CIVITCOW Civitas
Project: TASMCOA: Brown 22-5

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP28427-MS2	LW47213.D	1	09/04/25	JB	08/29/25	OP28427	GLW1106
OP28427-MSD2	LW47214.D	1	09/04/25	JB	08/29/25	OP28427	GLW1106
DA74796-3	LW47216.D	1	09/04/25	JB	08/29/25	OP28427	GLW1106

The QC reported here applies to the following samples:

Method: SW846-8015C

DA74798-1, DA74798-2, DA74798-3

CAS No.	Compound	DA74796-3 mg/kg	Spike Q	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-ORO (> C28-C36)	17.9	222	250	105	214	252	109	1	70-153/30

CAS No.	Surrogate Recoveries	MS	MSD	DA74796-3	Limits
84-15-1	o-Terphenyl	89%	86%	118%	20-142%

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: DA74798
Account: CIVITCOW - Civitas
Project: TASMCOA: Brown 22-5

QC Batch ID: MP42641
Matrix Type: SOLID

Methods: SW846 6020B
Units: mg/kg

Prep Date: 08/29/25

Metal	RL	IDL	MDL	MB raw	final
Aluminum	25	.26	2.5		
Antimony	0.20	.005	.025		
Arsenic	0.10	.025	.025	0.029	<0.10
Barium	1.0	.048	.12	0.10	<1.0
Beryllium	0.10	.038	.02		
Boron	20	9.1	5		
Cadmium	0.050	.015	.02	0.0090	<0.050
Calcium	200	13	15		
Chromium	1.0	.043	.3		
Cobalt	0.10	.02	.013		
Copper	1.0	.025	.13	0.093	<1.0
Iron	10	.8	7.5		
Lead	0.25	.047	.1	0.022	<0.25
Magnesium	50	5	5		
Manganese	0.50	.04	.1		
Molybdenum	0.50	.019	.14		
Nickel	1.0	.049	.1	-0.037	<1.0
Phosphorus	30	3.8	13		
Potassium	100	1	13		
Selenium	0.20	.025	.025	0.011	<0.20
Silver	0.050	.0041	.015	0.0029	<0.050
Sodium	250	5	15		
Strontium	10	.05	.5		
Thallium	0.10	.016	.02		
Tin	5.0	.11	2		
Titanium	1.0	.025	.15		
Uranium	0.10	.0074	.05		
Vanadium	0.50	.071	.1		
Zinc	5.0	.025	.5	0.099	<5.0

Associated samples MP42641: DA74798-1, DA74798-2, DA74798-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

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MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA74798
 Account: CIVITCOW - Civitas
 Project: TASMCOA: Brown 22-5

QC Batch ID: MP42641
 Matrix Type: SOLID

Methods: SW846 6020B
 Units: mg/kg

Prep Date: 08/29/25

Metal	DA74102-47 Original MS		Spike/lot ICPMS6	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	3.8	102	108	91.3	75-125
Barium	130	302	215	80.0	75-125
Beryllium					
Boron					
Cadmium	0.14	55.2	53.8	102.4	75-125
Calcium					
Chromium					
Cobalt					
Copper	5.6	55.9	53.8	93.6	75-125
Iron					
Lead	4.4	111	108	99.1	75-125
Magnesium					
Manganese					
Molybdenum					
Nickel	4.8	54.4	53.8	92.3	75-125
Phosphorus					
Potassium					
Selenium	0.15	96.1	108	89.2	75-125
Silver	0.017	22.1	21.5	102.7	75-125
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	31.4	63.8	53.8	60.3N(a)	75-125

Associated samples MP42641: DA74798-1, DA74798-2, DA74798-3

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA74798
 Account: CIVITCOW - Civitas
 Project: TASMCOA: Brown 22-5

QC Batch ID: MP42641
 Matrix Type: SOLID

Methods: SW846 6020B
 Units: mg/kg

Prep Date: 08/29/25

Metal	DA74102-47 Original MSD		SpikeLot ICPMS6 % Rec		MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	3.8	92.6	98	90.6	9.7	20
Barium	130	290	196	81.6	4.1	20
Beryllium						
Boron						
Cadmium	0.14	50.5	49	102.7	8.9	20
Calcium						
Chromium						
Cobalt						
Copper	5.6	51.1	49	92.8	9.0	20
Iron						
Lead	4.4	102	98	99.6	8.5	20
Magnesium						
Manganese						
Molybdenum						
Nickel	4.8	49.9	49	92.0	8.6	20
Phosphorus						
Potassium						
Selenium	0.15	88.0	98	89.6	8.8	20
Silver	0.017	20.3	19.6	103.4	8.5	20
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	31.4	59.5	49	57.3N(a)	7.0	20

Associated samples MP42641: DA74798-1, DA74798-2, DA74798-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested
 (a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA74798
 Account: CIVITCOW - Civitas
 Project: TASMCOA: Brown 22-5

QC Batch ID: MP42641
 Matrix Type: SOLID

Methods: SW846 6020B
 Units: mg/kg

Prep Date: 08/29/25

Metal	BSP Result	Spikelot ICPMS6	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	100	100	100.0	80-120
Barium	193	200	96.5	80-120
Beryllium				
Boron				
Cadmium	51.3	50	102.6	80-120
Calcium				
Chromium				
Cobalt				
Copper	51.9	50	103.8	80-120
Iron				
Lead	100	100	100.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel	51.1	50	102.2	80-120
Phosphorus				
Potassium				
Selenium	95.2	100	95.2	80-120
Silver	20.7	20	103.5	80-120
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	49.4	50	98.8	80-120

Associated samples MP42641: DA74798-1, DA74798-2, DA74798-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

8.1.3
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: DA74798
 Account: CIVITCOW - Civitas
 Project: TASMCOA: Brown 22-5

QC Batch ID: MP42641
 Matrix Type: SOLID

Methods: SW846 6020B
 Units: ug/l

Prep Date: 08/29/25

Metal	DA74102-47		QC	
	Original	SDL 5:25	%DIF	Limits
Aluminum				
Antimony				
Arsenic	34.9	35.9	2.9	0-20
Barium	1190	1210	2.2	0-20
Beryllium				
Boron				
Cadmium	1.26	1.09	13.9	0-20
Calcium				
Chromium				
Cobalt				
Copper	51.2	55.4	8.1	0-20
Iron				
Lead	39.8	40.1	0.8	0-20
Magnesium				
Manganese				
Molybdenum				
Nickel	43.8	45.1	2.9	0-20
Phosphorus				
Potassium				
Selenium	1.36	1.86	36.8 (a)	0-20
Silver	0.155	0.00	100.0 (a)	0-20
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	286	312	9.0	0-20

Associated samples MP42641: DA74798-1, DA74798-2, DA74798-3

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

8.1.4
8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: DA74798
Account: CIVITCOW - Civitas
Project: TASMCOA: Brown 22-5

QC Batch ID: MP42652
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 08/29/25

Metal	RL	IDL	MDL	MB raw	final
Aluminum	500	9.9	75		
Arsenic	130	11	23		
Barium	50	.95	6.5		
Beryllium	50	.5	6.5		
Boron	250	6.3	32	-7.0	<250
Cadmium	50	1.1	6.5		
Calcium	2000	28	250		
Chromium	50	3.4	6.5		
Cobalt	25	4.1	3.2		
Copper	50	2.5	6.5		
Iron	350	9.3	60		
Lead	250	21	32		
Lithium	25	10	6.5		
Magnesium	1000	35	130		
Manganese	25	.85	3.2		
Molybdenum	50	13	14		
Nickel	150	5.7	19		
Potassium	5000	180	630		
Selenium	250	46	110		
Silicon	1000	210	750		
Silver	150	2.8	19		
Sodium	2000	43	250		
Strontium	25	.5	3.2		
Thallium	50	30	22		
Tin	300	17	260		
Titanium	50	2.2	6.5		
Uranium	250	57	43		
Vanadium	50	5.2	6.5		
Zinc	150	3.4	19		

Associated samples MP42652: DA74798-1B, DA74798-2B, DA74798-3B

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

8.2.1
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA74798
 Account: CIVITCOW - Civitas
 Project: TASMCOA: Brown 22-5

QC Batch ID: MP42652
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 08/29/25 08/29/25

Metal	DA74802-10B Original	DUP	RPD	QC Limits	DA74802-10B Original MS	Spikelot ICPAL6	% Rec	QC Limits
Aluminum								
Arsenic								
Barium								
Beryllium								
Boron	183	193	5.3	0-20	183	10400	10000	102.2 75-125
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Lithium								
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silicon								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Uranium								
Vanadium								
Zinc								

Associated samples MP42652: DA74798-1B, DA74798-2B, DA74798-3B

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.2.2
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA74798
 Account: CIVITCOW - Civitas
 Project: TASMCOA: Brown 22-5

QC Batch ID: MP42652
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 08/29/25

Metal	BSP Result	Spikelot ICPALL6	% Rec	QC Limits
Aluminum				
Arsenic				
Barium				
Beryllium				
Boron	10100	10000	101.0	80-120
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silicon				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP42652: DA74798-1B, DA74798-2B, DA74798-3B

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

8.2.3
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: DA74798
 Account: CIVITCOW - Civitas
 Project: TASMCOA: Brown 22-5

QC Batch ID: MP42652
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 08/29/25

Metal	DA74802-10B Original	SDL 1:5	%DIF	QC Limits
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Aluminum				
Arsenic				
Barium				
Beryllium				
Boron	36.5	31.3	14.2 (a)	0-10
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silicon				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP42652: DA74798-1B, DA74798-2B, DA74798-3B

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested
 (a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

8.2.4
8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: DA74798
Account: CIVITCOW - Civitas
Project: TASMCOA: Brown 22-5

QC Batch ID: MP42707
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 09/03/25

Metal	RL	IDL	MDL	MB raw	final
Aluminum	1500	690	230		
Antimony	450	210	100		
Arsenic	380	330	69		
Barium	150	4.5	20		
Beryllium	150	15	20		
Boron	750	50	95		
Cadmium	150	29	20		
Calcium	6000	99	750	438	<6000
Chromium	150	17	20		
Cobalt	75	41	9.5		
Copper	150	69	20		
Iron	1100	130	180		
Lead	750	200	95		
Lithium	75	9	20		
Magnesium	3000	740	380	-12	<3000
Manganese	75	7.5	9.5		
Molybdenum	150	130	42		
Nickel	450	93	57		
Phosphorus	1500	1400	240		
Potassium	15000	1300	1900		
Selenium	750	450	320		
Silicon	3000	620	2300		
Silver	450	9	57		
Sodium	6000	190	750	389	<6000
Strontium	75	1.5	9.5		
Thallium	150	260	65		
Tin	900	620	770		
Titanium	150	7.5	20		
Uranium	750	59	130		
Vanadium	150	14	20		
Zinc	450	140	57		

Associated samples MP42707: DA74798-1A, DA74798-2A, DA74798-3A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: DA74798
Account: CIVITCOW - Civitas
Project: TASMCOA: Brown 22-5

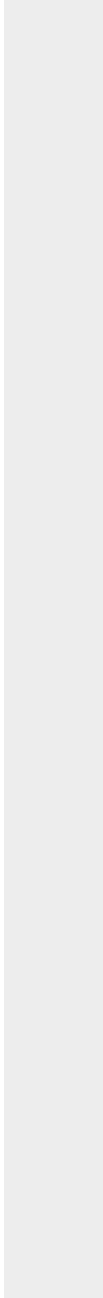
QC Batch ID: MP42707
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 09/03/25

Metal	RL	IDL	MDL	MB raw	final
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(anr) Analyte not requested



8.3.1

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA74798
 Account: CIVITCOW - Civitas
 Project: TASMCOA: Brown 22-5

QC Batch ID: MP42707
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 09/03/25

Metal	DA74799-6A Original MS	SpikeLot ICPAL6	% Rec	QC Limits	
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Boron					
Cadmium					
Calcium	29900	405000	375000	100.0	75-125
Chromium					
Cobalt					
Copper					
Iron					
Lead					
Lithium					
Magnesium	6670	366000	375000	95.8	75-125
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium					
Silicon					
Silver					
Sodium	3350	386000	375000	102.0	75-125
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc					

Associated samples MP42707: DA74798-1A, DA74798-2A, DA74798-3A

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

8.3.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA74798
Account: CIVITCOW - Civitas
Project: TASMCOA: Brown 22-5

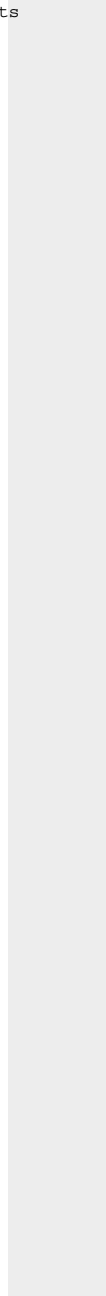
QC Batch ID: MP42707
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 09/03/25

Metal	DA74799-6A Original MS	SpikeLot ICPAL6	% Rec	QC Limits
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(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested



8.3.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA74798
 Account: CIVITCOW - Civitas
 Project: TASMCOA: Brown 22-5

QC Batch ID: MP42707
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 09/03/25

Metal	DA74799-6A Original MSD	SpikeLot ICPAL6	% Rec	MSD RPD	QC Limit	
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium						
Calcium	29900	405000	375000	100.0	0.0	20
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Lithium						
Magnesium	6670	367000	375000	96.1	0.3	20
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium						
Silicon						
Silver						
Sodium	3350	389000	375000	102.8	0.8	20
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc						

Associated samples MP42707: DA74798-1A, DA74798-2A, DA74798-3A

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

8.3.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA74798
Account: CIVITCOW - Civitas
Project: TASMCOA: Brown 22-5

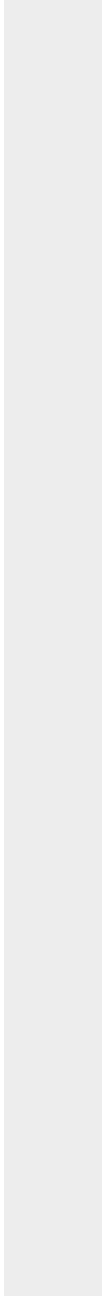
QC Batch ID: MP42707
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 09/03/25

Metal	DA74799-6A Original MSD	SpikeLot ICPAL6 % Rec	MSD RPD	QC Limit
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(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested



8.3.2
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA74798
 Account: CIVITCOW - Civitas
 Project: TASMCOA: Brown 22-5

QC Batch ID: MP42707
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 09/03/25

Metal	BSP Result	Spikelot ICPALL6	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium	387000	375000	103.2	80-120
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium	370000	375000	98.7	80-120
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium	394000	375000	105.1	80-120
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP42707: DA74798-1A, DA74798-2A, DA74798-3A

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

8.3.3
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA74798
Account: CIVITCOW - Civitas
Project: TASMCOA: Brown 22-5

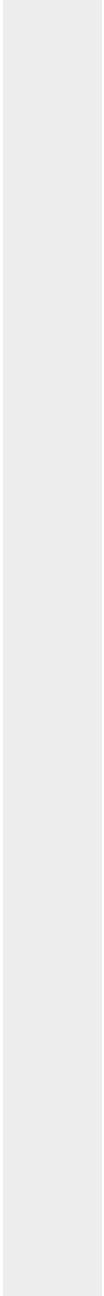
QC Batch ID: MP42707
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 09/03/25

Metal	BSP Result	Spikelot ICPALL6	% Rec	QC Limits
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(anr) Analyte not requested



8.3.3
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: DA74798
 Account: CIVITCOW - Civitas
 Project: TASMCOA: Brown 22-5

QC Batch ID: MP42707
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 09/03/25

Metal	DA74799-6A Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium	1990	2140	7.4	0-10
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium	445	451	1.5	0-10
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium	223	123	44.7 (a)	0-10
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP42707: DA74798-1A, DA74798-2A, DA74798-3A

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

8.3.4
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: DA74798
Account: CIVITCOW - Civitas
Project: TASMCOA: Brown 22-5

QC Batch ID: MP42707
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 09/03/25

Metal	DA74799-6A	QC
	Original SDL 1:5 %DIF	Limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

8.3.4

8

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA74798
Account: CIVITCOW - Civitas
Project: TASMCOA: Brown 22-5

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Specific Conductivity	GP39398/GN68906			mmhos/cm	1.409	1.4	99.6	90-110%

Associated Samples:
Batch GP39398: DA74798-1, DA74798-2, DA74798-3
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA74798
Account: CIVITCOW - Civitas
Project: TASMCOA: Brown 22-5

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Specific Conductivity	GP39398/GN68906	DA74795-3	mmhos/cm	0.13	0.14	5.6	0-20%
pH	GN68898	DA74795-3	su	7.17	7.17	0.0	0-5%

Associated Samples:

Batch GN68898: DA74798-1, DA74798-2, DA74798-3

Batch GP39398: DA74798-1, DA74798-2, DA74798-3

(*) Outside of QC limits

Misc. Forms

Custody Documents and Other Forms

(SGS Dayton, NJ)

Includes the following where applicable:

- Chain of Custody

SGS Sample Receipt Summary

Job Number: DA74798

Client: SGS NORTH AMERICA INC.

Project: TASMCOA: BROWN 22-5

Date / Time Received: 8/30/2025 10:00:00 AM

Delivery Method: FEDEX

Airbill #'s:

Cooler Temps (Raw Measured) °C: Cooler 1: (1.8);

Cooler Temps (Corrected) °C: Cooler 1: (1.9);

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. SmpI Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR-50 | |
| 3. Cooler media: | Ice (Bag) | |
| 4. No. Coolers: | 1 | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N

N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Test Strip Lot #s:	pH 1-12: 231619	pH 12+: 203117A	Other: (Specify) _____
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Comments

SM089-03
Rev. Date 12/7/17

DA74798: Chain of Custody

Page 2 of 2

10.1 10

General Chemistry

QC Data Summaries

(SGS Dayton, NJ)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries



METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA74798
Account: ALMS - SGS Wheat Ridge, CO
Project: CIVITCOW: TASMCOA: Brown 22-5

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chromium, Hexavalent	GP63880/GN73407	0.40	0.0	mg/kg	40	39.6	99.0	80-120%
Chromium, Hexavalent	GP63880/GN73407			mg/kg	856	834	97.4	80-120%

Associated Samples:
Batch GP63880: DA74798-1, DA74798-2, DA74798-3
(*) Outside of QC limits

11.1
11

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA74798
Account: ALMS - SGS Wheat Ridge, CO
Project: CIVITCOW: TASMCOA: Brown 22-5

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chromium, Hexavalent	GP63880/GN73407	DA74798-2	mg/kg	0.0	0.0	0.0	0-20%

Associated Samples:

Batch GP63880: DA74798-1, DA74798-2, DA74798-3

(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA74798
Account: ALMS - SGS Wheat Ridge, CO
Project: CIVITCOW: TASMCOA: Brown 22-5

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chromium, Hexavalent	GP63880/GN73407	DA74798-2	mg/kg	0.0	46.7	44.6	95.4(a)	75-125%
Chromium, Hexavalent	GP63880/GN73407	DA74798-2	mg/kg	0.0	910	930	102.2(b)	75-125%

Associated Samples:

Batch GP63880: DA74798-1, DA74798-2, DA74798-3

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Good recovery on soluble XCR matrix spike. Good recovery (102%) on the post-spike.

(b) Good recovery on insoluble XCR matrix spike. See additional comments on soluble matrix spike recovery.