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Automated Report

Technical Report for

Civitas

ENSOCOWR: Dutch Lake 22-34H

09C2407120

SGS Job Number: DA77646

Sampling Date: 12/01/25

Report to:

Ensolum, LLC
11049 W 44th Avenue, Suite 100
Wheat Ridge, CO 80033
nam.ehs.table915@sgs.com

ATTN: Tanna Lyon

Total number of pages in report: 105



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.

Eric Hoffman

Client Service contact: Joseph Rhoades 303-425-6021

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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START SURVEY



January 6, 2026

Tanna Lyon
Ensolum, LLC
11049 W 44th Avenue, Suite 100
Wheat Ridge, CO 80033

Subject: Report Reissue for SGS Job: DA77646

Dear Tanna Lyon,

This reissue updated the report with correct COC.

Please accept our apologies for any inconvenience this may have caused you.

Any questions or concerns should be directed to the undersigned at 303-425-6021.

Sincerely,

A handwritten signature in black ink, appearing to read 'E. Hoffman', written over a light blue horizontal line.

Eric Hoffman
General Manager

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Sample Summary

Civitas

Job No: DA77646

ENSOCOWR: Dutch Lake 22-34H
 Project No: 09C2407120

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
DA77646-1	12/01/25	08:50 MB	12/01/25	SO	Soil	BG01@3'
DA77646-1A	12/01/25	08:50 MB	12/01/25	SO	Soil	BG01@3'
DA77646-1B	12/01/25	08:50 MB	12/01/25	SO	Soil	BG01@3'
DA77646-2	12/01/25	09:12 MB	12/01/25	SO	Soil	BG01@6'
DA77646-2A	12/01/25	09:12 MB	12/01/25	SO	Soil	BG01@6'
DA77646-2B	12/01/25	09:12 MB	12/01/25	SO	Soil	BG01@6'
DA77646-3	12/01/25	09:20 MB	12/01/25	SO	Soil	BG02@3'
DA77646-3A	12/01/25	09:20 MB	12/01/25	SO	Soil	BG02@3'
DA77646-3B	12/01/25	09:20 MB	12/01/25	SO	Soil	BG02@3'
DA77646-4	12/01/25	09:40 MB	12/01/25	SO	Soil	BG02@6'
DA77646-4A	12/01/25	09:40 MB	12/01/25	SO	Soil	BG02@6'
DA77646-4B	12/01/25	09:40 MB	12/01/25	SO	Soil	BG02@6'
DA77646-5	12/01/25	09:50 MB	12/01/25	SO	Soil	BG03@3'

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



Sample Summary

(continued)

Civitas

Job No: DA77646

ENSOCOWR: Dutch Lake 22-34H
 Project No: 09C2407120

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
DA77646-5A	12/01/25	09:50 MB	12/01/25	SO	Soil	BG03@3'
DA77646-5B	12/01/25	09:50 MB	12/01/25	SO	Soil	BG03@3'
DA77646-6	12/01/25	10:08 MB	12/01/25	SO	Soil	BG03@6'
DA77646-6A	12/01/25	10:08 MB	12/01/25	SO	Soil	BG03@6'
DA77646-6B	12/01/25	10:08 MB	12/01/25	SO	Soil	BG03@6'
DA77646-7	12/01/25	10:15 MB	12/01/25	SO	Soil	BG04@3'
DA77646-7A	12/01/25	10:15 MB	12/01/25	SO	Soil	BG04@3'
DA77646-7B	12/01/25	10:15 MB	12/01/25	SO	Soil	BG04@3'
DA77646-8	12/01/25	10:30 MB	12/01/25	SO	Soil	BG04@6'
DA77646-8A	12/01/25	10:30 MB	12/01/25	SO	Soil	BG04@6'
DA77646-8B	12/01/25	10:30 MB	12/01/25	SO	Soil	BG04@6'
DA77646-9	12/01/25	10:45 MB	12/01/25	SO	Soil	BG05@3'
DA77646-9A	12/01/25	10:45 MB	12/01/25	SO	Soil	BG05@3'

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



Sample Summary

(continued)

Civitas

Job No: DA77646

ENSOCOWR: Dutch Lake 22-34H
 Project No: 09C2407120

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
DA77646-9B	12/01/25	10:45 MB	12/01/25	SO	Soil	BG05@3'
DA77646-10	12/01/25	11:05 MB	12/01/25	SO	Soil	BG05@6'
DA77646-10A	12/01/25	11:05 MB	12/01/25	SO	Soil	BG05@6'
DA77646-10B	12/01/25	11:05 MB	12/01/25	SO	Soil	BG05@6'

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

Summary of Hits

Job Number: DA77646
Account: Civitas
Project: ENSOCOWR: Dutch Lake 22-34H
Collected: 12/01/25

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

DA77646-1 BG01@3'

Arsenic		2.8	0.18		mg/kg	SW846 6020B
Barium		54.2	1.8		mg/kg	SW846 6020B
Copper		3.7	1.8		mg/kg	SW846 6020B
Lead		4.3	0.44		mg/kg	SW846 6020B
Nickel		2.8	1.8		mg/kg	SW846 6020B
Zinc		11.1	8.8		mg/kg	SW846 6020B
pH ^a		7.95			su	WREP-125,4E-SATPASTE
Specific Conductivity ^b		0.030	0.010		mmhos/cm	SM 2510B-2011 MOD

DA77646-1A BG01@3'

Calcium ^c		25.4	1.5		mg/l	SW846 6010C
Magnesium ^c		6.77	1.5		mg/l	SW846 6010C
Sodium Adsorption Ratio ^d		0.100			ratio	USDA HANDBOOK 60

DA77646-1B BG01@3'

No hits reported in this sample.

DA77646-2 BG01@6'

Arsenic		4.6	0.20		mg/kg	SW846 6020B
Barium		42.3	2.0		mg/kg	SW846 6020B
Copper		5.0	2.0		mg/kg	SW846 6020B
Lead		5.0	0.49		mg/kg	SW846 6020B
Nickel		5.5	2.0		mg/kg	SW846 6020B
Zinc		17.5	9.8		mg/kg	SW846 6020B
pH ^a		8.20			su	WREP-125,4E-SATPASTE
Specific Conductivity ^b		0.16	0.010		mmhos/cm	SM 2510B-2011 MOD

DA77646-2A BG01@6'

Calcium ^c		20.8	1.5		mg/l	SW846 6010C
Magnesium ^c		8.13	1.5		mg/l	SW846 6010C
Sodium ^c		24.8	7.5		mg/l	SW846 6010C
Sodium Adsorption Ratio ^d		1.17			ratio	USDA HANDBOOK 60

DA77646-2B BG01@6'

No hits reported in this sample.

Summary of Hits

Job Number: DA77646
Account: Civitas
Project: ENSOCOWR: Dutch Lake 22-34H
Collected: 12/01/25

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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DA77646-3 BG02@3'

Arsenic		3.2	0.18		mg/kg	SW846 6020B
Barium		78.8	1.8		mg/kg	SW846 6020B
Cadmium		0.092	0.091		mg/kg	SW846 6020B
Copper		4.6	1.8		mg/kg	SW846 6020B
Lead		4.3	0.45		mg/kg	SW846 6020B
Nickel		4.0	1.8		mg/kg	SW846 6020B
Zinc		14.8	9.1		mg/kg	SW846 6020B
pH ^a		7.62			su	WREP-125,4E-SATPASTE
Specific Conductivity ^b		0.15	0.010		mmhos/cm	SM 2510B-2011 MOD
Chromium, Hexavalent ^e		0.75	0.43		mg/kg	SW846 3060A/7199

DA77646-3A BG02@3'

Calcium ^c		84.4	1.5		mg/l	SW846 6010C
Magnesium ^c		3.90	1.5		mg/l	SW846 6010C
Sodium Adsorption Ratio ^d		0.0843			ratio	USDA HANDBOOK 60

DA77646-3B BG02@3'

No hits reported in this sample.

DA77646-4 BG02@6'

Arsenic		2.8	0.19		mg/kg	SW846 6020B
Barium		89.4	1.9		mg/kg	SW846 6020B
Copper		4.0	1.9		mg/kg	SW846 6020B
Lead		4.5	0.48		mg/kg	SW846 6020B
Nickel		3.4	1.9		mg/kg	SW846 6020B
Zinc		14.7	9.6		mg/kg	SW846 6020B
pH ^a		8.06			su	WREP-125,4E-SATPASTE
Specific Conductivity ^b		0.11	0.010		mmhos/cm	SM 2510B-2011 MOD

DA77646-4A BG02@6'

Calcium ^c		35.1	1.5		mg/l	SW846 6010C
Magnesium ^c		3.93	1.5		mg/l	SW846 6010C
Sodium Adsorption Ratio ^d		0.133			ratio	USDA HANDBOOK 60

DA77646-4B BG02@6'

No hits reported in this sample.

Summary of Hits

Job Number: DA77646
Account: Civitas
Project: ENSOCOWR: Dutch Lake 22-34H
Collected: 12/01/25

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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DA77646-5 BG03@3'

Arsenic	1.3	0.18			mg/kg	SW846 6020B
Barium	94.8	1.8			mg/kg	SW846 6020B
Cadmium	0.13	0.089			mg/kg	SW846 6020B
Copper	6.0	1.8			mg/kg	SW846 6020B
Lead	5.2	0.45			mg/kg	SW846 6020B
Nickel	4.7	1.8			mg/kg	SW846 6020B
Zinc	20.4	8.9			mg/kg	SW846 6020B
pH ^a	7.81				su	WREP-125,4E-SATPASTE
Specific Conductivity ^b	0.11	0.010			mmhos/cm	SM 2510B-2011 MOD

DA77646-5A BG03@3'

Calcium ^c	30.2	1.5			mg/l	SW846 6010C
Magnesium ^c	10.4	1.5			mg/l	SW846 6010C
Sodium Adsorption Ratio ^d	0.266				ratio	USDA HANDBOOK 60

DA77646-5B BG03@3'

No hits reported in this sample.

DA77646-6 BG03@6'

Arsenic	1.3	0.20			mg/kg	SW846 6020B
Barium	106	2.0			mg/kg	SW846 6020B
Cadmium	0.14	0.098			mg/kg	SW846 6020B
Copper	5.3	2.0			mg/kg	SW846 6020B
Lead	5.2	0.49			mg/kg	SW846 6020B
Nickel	5.6	2.0			mg/kg	SW846 6020B
Zinc	20.7	9.8			mg/kg	SW846 6020B
pH ^a	8.07				su	WREP-125,4E-SATPASTE
Specific Conductivity ^b	0.30	0.010			mmhos/cm	SM 2510B-2011 MOD

DA77646-6A BG03@6'

Calcium ^c	77.5	1.5			mg/l	SW846 6010C
Magnesium ^c	24.4	1.5			mg/l	SW846 6010C
Sodium ^c	10.3	7.5			mg/l	SW846 6010C
Sodium Adsorption Ratio ^d	0.261				ratio	USDA HANDBOOK 60

DA77646-6B BG03@6'

No hits reported in this sample.

Summary of Hits

Job Number: DA77646
Account: Civitas
Project: ENSOCOWR: Dutch Lake 22-34H
Collected: 12/01/25

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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DA77646-7 BG04@3'

Arsenic	2.1	0.18			mg/kg	SW846 6020B
Barium	41.0	1.8			mg/kg	SW846 6020B
Copper	3.6	1.8			mg/kg	SW846 6020B
Lead	3.9	0.44			mg/kg	SW846 6020B
Nickel	2.8	1.8			mg/kg	SW846 6020B
Zinc	11.7	8.9			mg/kg	SW846 6020B
pH ^a	8.18				su	WREP-125,4E-SATPASTE
Specific Conductivity ^b	0.069	0.010			mmhos/cm	SM 2510B-2011 MOD

DA77646-7A BG04@3'

Calcium ^c	27.3	1.5			mg/l	SW846 6010C
Magnesium ^c	7.38	1.5			mg/l	SW846 6010C
Sodium Adsorption Ratio ^d	0.109				ratio	USDA HANDBOOK 60

DA77646-7B BG04@3'

No hits reported in this sample.

DA77646-8 BG04@6'

Arsenic	2.6	0.19			mg/kg	SW846 6020B
Barium	111	1.9			mg/kg	SW846 6020B
Cadmium	0.14	0.097			mg/kg	SW846 6020B
Copper	5.8	1.9			mg/kg	SW846 6020B
Lead	4.9	0.49			mg/kg	SW846 6020B
Nickel	5.0	1.9			mg/kg	SW846 6020B
Zinc	17.1	9.7			mg/kg	SW846 6020B
pH ^a	8.24				su	WREP-125,4E-SATPASTE
Specific Conductivity ^b	0.22	0.010			mmhos/cm	SM 2510B-2011 MOD

DA77646-8A BG04@6'

Calcium ^c	52.1	1.5			mg/l	SW846 6010C
Magnesium ^c	10.9	1.5			mg/l	SW846 6010C
Sodium Adsorption Ratio ^d	0.240				ratio	USDA HANDBOOK 60

DA77646-8B BG04@6'

No hits reported in this sample.

Summary of Hits

Job Number: DA77646
Account: Civitas
Project: ENSOCOWR: Dutch Lake 22-34H
Collected: 12/01/25

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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DA77646-9 BG05@3'

Arsenic		2.2	0.21		mg/kg	SW846 6020B
Barium		46.6	2.1		mg/kg	SW846 6020B
Copper		3.9	2.1		mg/kg	SW846 6020B
Lead		3.6	0.52		mg/kg	SW846 6020B
Nickel		3.1	2.1		mg/kg	SW846 6020B
Zinc		12.4	10		mg/kg	SW846 6020B
pH ^a		8.00			su	WREP-125,4E-SATPASTE
Specific Conductivity ^b		0.12	0.010		mmhos/cm	SM 2510B-2011 MOD

DA77646-9A BG05@3'

Calcium ^c		42.5	1.5		mg/l	SW846 6010C
Magnesium ^c		3.59	1.5		mg/l	SW846 6010C
Sodium Adsorption Ratio ^d		0.0878			ratio	USDA HANDBOOK 60

DA77646-9B BG05@3'

No hits reported in this sample.

DA77646-10 BG05@6'

Arsenic		2.6	0.19		mg/kg	SW846 6020B
Barium		69.5	1.9		mg/kg	SW846 6020B
Copper		4.2	1.9		mg/kg	SW846 6020B
Lead		5.3	0.47		mg/kg	SW846 6020B
Nickel		4.0	1.9		mg/kg	SW846 6020B
Zinc		15.8	9.4		mg/kg	SW846 6020B
pH ^a		7.31			su	WREP-125,4E-SATPASTE
Specific Conductivity ^b		0.096	0.010		mmhos/cm	SM 2510B-2011 MOD

DA77646-10A BG05@6'

Calcium ^c		39.9	1.5		mg/l	SW846 6010C
Magnesium ^c		2.96	1.5		mg/l	SW846 6010C
Sodium Adsorption Ratio ^d		0.122			ratio	USDA HANDBOOK 60

DA77646-10B BG05@6'

No hits reported in this sample.

(a) Saturated paste was generated on 12/05/2025 0906 Analysis performed at SGS Scott, LA.

(b) Saturated paste was generated on 12/05/2025 @9:06 MP32217 Analysis performed at SGS Scott, LA.

(c) Analysis performed at SGS Scott, LA.

Summary of Hits

Job Number: DA77646
Account: Civitas
Project: ENSOCOWR: Dutch Lake 22-34H
Collected: 12/01/25

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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(d) Calculated as: $(\text{Na meq/L}) / \sqrt{[(\text{Ca meq/L}) + (\text{Mg meq/L})/2]}$
(e) Analysis performed at SGS Dayton, NJ.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: BG01@3'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-1	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 97.5
Project: ENSOCOWR: Dutch Lake 22-34H	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	2.8	0.18	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Barium	54.2	1.8	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Cadmium	< 0.088	0.088	mg/kg	10	12/02/25	12/11/25 GS	SW846 6020B ²	SW846 3050B ³
Copper	3.7	1.8	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Lead	4.3	0.44	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Nickel	2.8	1.8	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Selenium	< 0.18	0.18	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Silver	< 0.088	0.088	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Zinc	11.1	8.8	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA19944
- (2) Instrument QC Batch: MA19956
- (3) Prep QC Batch: MP44753

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG01@3'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-1	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 97.5
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	97.5		%	1	12/01/25	LM	SM2540G-2011 M
pH-saturated paste method							
pH ^a	7.95		su	1	12/05/25 16:06	ALA	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity ^b	0.030	0.010	mmhos/cm	1	12/05/25 11:11	ALA	SM 2510B-2011 MOD
Chromium, Hexavalent ^c	< 0.40	0.40	mg/kg	1	12/26/25 20:48	ANJ	SW846 3060A/7199

(a) Saturated paste was generated on 12/05/2025 0906 Analysis performed at SGS Scott, LA.

(b) Saturated paste was generated on 12/05/2025 @9:06 MP32217 Analysis performed at SGS Scott, LA.

(c) Analysis performed at SGS Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG01@3'		Date Sampled: 12/01/25
Lab Sample ID: DA77646-1A		Date Received: 12/01/25
Matrix: SO - Soil		Percent Solids: 97.5
Project: ENSOCOWR: Dutch Lake 22-34H		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium ^a	25.4	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium ^a	6.77	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium ^a	< 7.5	7.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: L:MA31263

(2) Prep QC Batch: L:MP32217

(a) Analysis performed at SGS Scott, LA.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG01@3'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-1A	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 97.5
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.100		ratio	1	12/05/25 22:28	ALA	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: BG01@3'	
Lab Sample ID: DA77646-1B	Date Sampled: 12/01/25
Matrix: SO - Soil	Date Received: 12/01/25
	Percent Solids: 97.5
Project: ENSOCOWR: Dutch Lake 22-34H	

Hot Water Soluble Boron Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Boron	< 0.25	0.25	mg/l	1	12/02/25	12/10/25 BR	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19946

(2) Prep QC Batch: MP44756

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG01@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-2	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 95.7
Project: ENSOCOWR: Dutch Lake 22-34H	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	4.6	0.20	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Barium	42.3	2.0	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Cadmium	< 0.098	0.098	mg/kg	10	12/02/25	12/11/25 GS	SW846 6020B ²	SW846 3050B ³
Copper	5.0	2.0	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Lead	5.0	0.49	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Nickel	5.5	2.0	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Selenium	< 0.20	0.20	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Silver	< 0.098	0.098	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Zinc	17.5	9.8	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA19944
- (2) Instrument QC Batch: MA19956
- (3) Prep QC Batch: MP44753

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG01@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-2	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 95.7
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	95.7		%	1	12/01/25	LM	SM2540G-2011 M
pH-saturated paste method							
pH ^a	8.20		su	1	12/05/25 16:06	ALA	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity ^b	0.16	0.010	mmhos/cm	1	12/05/25 11:11	ALA	SM 2510B-2011 MOD
Chromium, Hexavalent ^c	< 0.42	0.42	mg/kg	1	12/26/25 19:12	ANJ	SW846 3060A/7199

(a) Saturated paste was generated on 12/05/2025 0906 Analysis performed at SGS Scott, LA.

(b) Saturated paste was generated on 12/05/2025 @9:06 MP32217 Analysis performed at SGS Scott, LA.

(c) Analysis performed at SGS Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG01@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-2A	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 95.7
Project: ENSOCOWR: Dutch Lake 22-34H	

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium ^a	20.8	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium ^a	8.13	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium ^a	24.8	7.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: L:MA31263

(2) Prep QC Batch: L:MP32217

(a) Analysis performed at SGS Scott, LA.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG01@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-2A	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 95.7
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	1.17		ratio	1	12/05/25 22:32	ALA	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: BG01@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-2B	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 95.7
Project: ENSOCOWR: Dutch Lake 22-34H	

Hot Water Soluble Boron Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Boron	< 0.25	0.25	mg/l	1	12/02/25	12/10/25 BR	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19946

(2) Prep QC Batch: MP44756

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG02@3'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-3	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 96.6
Project: ENSOCOWR: Dutch Lake 22-34H	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	3.2	0.18	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Barium	78.8	1.8	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Cadmium	0.092	0.091	mg/kg	10	12/02/25	12/12/25 CDL	SW846 6020B ²	SW846 3050B ³
Copper	4.6	1.8	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Lead	4.3	0.45	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Nickel	4.0	1.8	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Selenium	< 0.18	0.18	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Silver	< 0.091	0.091	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Zinc	14.8	9.1	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA19944
- (2) Instrument QC Batch: MA19962
- (3) Prep QC Batch: MP44753

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG02@3'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-3	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 96.6
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	96.6		%	1	12/01/25	LM	SM2540G-2011 M
pH-saturated paste method							
pH ^a	7.62		su	1	12/05/25 16:06	ALA	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity ^b	0.15	0.010	mmhos/cm	1	12/05/25 11:11	ALA	SM 2510B-2011 MOD
Chromium, Hexavalent ^c	0.75	0.43	mg/kg	1	12/26/25 21:12	ANJ	SW846 3060A/7199

(a) Saturated paste was generated on 12/05/2025 0906 Analysis performed at SGS Scott, LA.

(b) Saturated paste was generated on 12/05/2025 @9:06 MP32217 Analysis performed at SGS Scott, LA.

(c) Analysis performed at SGS Dayton, NJ.

RL = Reporting Limit

Report of Analysis



Client Sample ID: BG02@3'		Date Sampled: 12/01/25
Lab Sample ID: DA77646-3A		Date Received: 12/01/25
Matrix: SO - Soil		Percent Solids: 96.6
Project: ENSOCOWR: Dutch Lake 22-34H		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium ^a	84.4	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium ^a	3.90	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium ^a	< 7.5	7.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: L:MA31263

(2) Prep QC Batch: L:MP32217

(a) Analysis performed at SGS Scott, LA.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG02@3'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-3A	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 96.6
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.0843		ratio	1	12/05/25 22:44	ALA	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: BG02@3'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-3B	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 96.6
Project: ENSOCOWR: Dutch Lake 22-34H	

Hot Water Soluble Boron Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Boron	< 0.25	0.25	mg/l	1	12/02/25	12/10/25 BR	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19946

(2) Prep QC Batch: MP44756

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG02@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-4	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 97.4
Project: ENSOCOWR: Dutch Lake 22-34H	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	2.8	0.19	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Barium	89.4	1.9	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Cadmium	< 0.096	0.096	mg/kg	10	12/02/25	12/11/25 GS	SW846 6020B ²	SW846 3050B ³
Copper	4.0	1.9	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Lead	4.5	0.48	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Nickel	3.4	1.9	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Selenium	< 0.19	0.19	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Silver	< 0.096	0.096	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Zinc	14.7	9.6	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA19944
- (2) Instrument QC Batch: MA19956
- (3) Prep QC Batch: MP44753

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG02@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-4	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 97.4
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	97.4		%	1	12/01/25	LM	SM2540G-2011 M
pH-saturated paste method							
pH ^a	8.06		su	1	12/05/25 16:06	ALA	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity ^b	0.11	0.010	mmhos/cm	1	12/05/25 11:11	ALA	SM 2510B-2011 MOD
Chromium, Hexavalent ^c	< 0.41	0.41	mg/kg	1	12/26/25 21:35	ANJ	SW846 3060A/7199

(a) Saturated paste was generated on 12/05/2025 0906 Analysis performed at SGS Scott, LA.

(b) Saturated paste was generated on 12/05/2025 @9:06 MP32217 Analysis performed at SGS Scott, LA.

(c) Analysis performed at SGS Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG02@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-4A	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 97.4
Project: ENSOCOWR: Dutch Lake 22-34H	

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium ^a	35.1	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium ^a	3.93	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium ^a	< 7.5	7.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: L:MA31263

(2) Prep QC Batch: L:MP32217

(a) Analysis performed at SGS Scott, LA.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG02@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-4A	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 97.4
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.133		ratio	1	12/05/25 22:49	ALA	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: BG02@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-4B	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 97.4
Project: ENSOCOWR: Dutch Lake 22-34H	

Hot Water Soluble Boron Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Boron	< 0.25	0.25	mg/l	1	12/02/25	12/10/25 BR	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19946

(2) Prep QC Batch: MP44756

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG03@3'		Date Sampled: 12/01/25
Lab Sample ID: DA77646-5		Date Received: 12/01/25
Matrix: SO - Soil		Percent Solids: 94.9
Project: ENSOCOWR: Dutch Lake 22-34H		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.3	0.18	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Barium	94.8	1.8	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Cadmium	0.13	0.089	mg/kg	10	12/02/25	12/12/25 CDL	SW846 6020B ²	SW846 3050B ³
Copper	6.0	1.8	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Lead	5.2	0.45	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Nickel	4.7	1.8	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Selenium	< 0.18	0.18	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Silver	< 0.089	0.089	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Zinc	20.4	8.9	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA19944
- (2) Instrument QC Batch: MA19962
- (3) Prep QC Batch: MP44753

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG03@3'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-5	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 94.9
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	94.9		%	1	12/01/25	LM	SM2540G-2011 M
pH-saturated paste method							
pH ^a	7.81		su	1	12/05/25 16:06	ALA	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity ^b	0.11	0.010	mmhos/cm	1	12/05/25 11:11	ALA	SM 2510B-2011 MOD
Chromium, Hexavalent ^c	< 0.41	0.41	mg/kg	1	12/26/25 21:51	ANJ	SW846 3060A/7199

(a) Saturated paste was generated on 12/05/2025 0906 Analysis performed at SGS Scott, LA.

(b) Saturated paste was generated on 12/05/2025 @9:06 MP32217 Analysis performed at SGS Scott, LA.

(c) Analysis performed at SGS Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG03@3'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-5A	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 94.9
Project: ENSOCOWR: Dutch Lake 22-34H	

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium ^a	30.2	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium ^a	10.4	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium ^a	< 7.5	7.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: L:MA31263

(2) Prep QC Batch: L:MP32217

(a) Analysis performed at SGS Scott, LA.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG03@3'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-5A	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 94.9
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.266		ratio	1	12/05/25 22:53	ALA	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: BG03@3'	
Lab Sample ID: DA77646-5B	Date Sampled: 12/01/25
Matrix: SO - Soil	Date Received: 12/01/25
	Percent Solids: 94.9
Project: ENSOCOWR: Dutch Lake 22-34H	

Hot Water Soluble Boron Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Boron	< 0.25	0.25	mg/l	1	12/02/25	12/10/25 BR	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19946

(2) Prep QC Batch: MP44756

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG03@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-6	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 93.9
Project: ENSOCOWR: Dutch Lake 22-34H	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	1.3	0.20	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Barium	106	2.0	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Cadmium	0.14	0.098	mg/kg	10	12/02/25	12/12/25 CDL	SW846 6020B ²	SW846 3050B ³
Copper	5.3	2.0	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Lead	5.2	0.49	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Nickel	5.6	2.0	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Selenium	< 0.20	0.20	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Silver	< 0.098	0.098	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Zinc	20.7	9.8	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³

(1) Instrument QC Batch: MA19944

(2) Instrument QC Batch: MA19962

(3) Prep QC Batch: MP44753

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG03@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-6	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 93.9
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	93.9		%	1	12/01/25	LM	SM2540G-2011 M
pH-saturated paste method							
pH ^a	8.07		su	1	12/05/25 16:06	ALA	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity ^b	0.30	0.010	mmhos/cm	1	12/05/25 11:11	ALA	SM 2510B-2011 MOD
Chromium, Hexavalent ^c	< 0.42	0.42	mg/kg	1	12/26/25 22:07	ANJ	SW846 3060A/7199

(a) Saturated paste was generated on 12/05/2025 0906 Analysis performed at SGS Scott, LA.

(b) Saturated paste was generated on 12/05/2025 @9:06 MP32217 Analysis performed at SGS Scott, LA.

(c) Analysis performed at SGS Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG03@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-6A	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 93.9
Project: ENSOCOWR: Dutch Lake 22-34H	

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium ^a	77.5	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium ^a	24.4	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium ^a	10.3	7.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: L:MA31263

(2) Prep QC Batch: L:MP32217

(a) Analysis performed at SGS Scott, LA.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG03@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-6A	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 93.9
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.261		ratio	1	12/05/25 22:57	ALA	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: BG03@6'		Date Sampled: 12/01/25
Lab Sample ID: DA77646-6B		Date Received: 12/01/25
Matrix: SO - Soil		Percent Solids: 93.9
Project: ENSOCOWR: Dutch Lake 22-34H		

Hot Water Soluble Boron Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Boron	< 0.25	0.25	mg/l	1	12/02/25	12/10/25 BR	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19946

(2) Prep QC Batch: MP44756

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG04@3'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-7	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 97.2
Project: ENSOCOWR: Dutch Lake 22-34H	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	2.1	0.18	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Barium	41.0	1.8	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Cadmium	< 0.089	0.089	mg/kg	10	12/02/25	12/11/25 GS	SW846 6020B ²	SW846 3050B ³
Copper	3.6	1.8	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Lead	3.9	0.44	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Nickel	2.8	1.8	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Selenium	< 0.18	0.18	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Silver	< 0.089	0.089	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Zinc	11.7	8.9	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA19944
- (2) Instrument QC Batch: MA19956
- (3) Prep QC Batch: MP44753

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG04@3'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-7	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 97.2
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	97.2		%	1	12/01/25	LM	SM2540G-2011 M
pH-saturated paste method							
pH ^a	8.18		su	1	12/05/25 16:06	ALA	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity ^b	0.069	0.010	mmhos/cm	1	12/05/25 11:11	ALA	SM 2510B-2011 MOD
Chromium, Hexavalent ^c	< 0.41	0.41	mg/kg	1	12/26/25 22:23	ANJ	SW846 3060A/7199

(a) Saturated paste was generated on 12/05/2025 0906 Analysis performed at SGS Scott, LA.

(b) Saturated paste was generated on 12/05/2025 @9:06 MP32217 Analysis performed at SGS Scott, LA.

(c) Analysis performed at SGS Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG04@3'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-7A	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 97.2
Project: ENSOCOWR: Dutch Lake 22-34H	

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium ^a	27.3	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium ^a	7.38	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium ^a	< 7.5	7.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: L:MA31263

(2) Prep QC Batch: L:MP32217

(a) Analysis performed at SGS Scott, LA.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG04@3'		Date Sampled: 12/01/25
Lab Sample ID: DA77646-7A		Date Received: 12/01/25
Matrix: SO - Soil		Percent Solids: 97.2
Project: ENSOCOWR: Dutch Lake 22-34H		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.109		ratio	1	12/05/25 23:01	ALA	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: BG04@3'		Date Sampled: 12/01/25
Lab Sample ID: DA77646-7B		Date Received: 12/01/25
Matrix: SO - Soil		Percent Solids: 97.2
Project: ENSOCOWR: Dutch Lake 22-34H		

Hot Water Soluble Boron Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Boron	< 0.25	0.25	mg/l	1	12/02/25	12/10/25 BR	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19946

(2) Prep QC Batch: MP44756

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG04@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-8	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 93.7
Project: ENSOCOWR: Dutch Lake 22-34H	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	2.6	0.19	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Barium	111	1.9	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Cadmium	0.14	0.097	mg/kg	10	12/02/25	12/12/25 CDL	SW846 6020B ²	SW846 3050B ³
Copper	5.8	1.9	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Lead	4.9	0.49	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Nickel	5.0	1.9	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Selenium	< 0.19	0.19	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Silver	< 0.097	0.097	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Zinc	17.1	9.7	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA19944
- (2) Instrument QC Batch: MA19962
- (3) Prep QC Batch: MP44753

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG04@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-8	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 93.7
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	93.7		%	1	12/01/25	LM	SM2540G-2011 M
pH-saturated paste method							
pH ^a	8.24		su	1	12/05/25 16:06	ALA	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity ^b	0.22	0.010	mmhos/cm	1	12/05/25 11:11	ALA	SM 2510B-2011 MOD
Chromium, Hexavalent ^c	< 0.42	0.42	mg/kg	1	12/26/25 22:39	ANJ	SW846 3060A/7199

(a) Saturated paste was generated on 12/05/2025 0906 Analysis performed at SGS Scott, LA.

(b) Saturated paste was generated on 12/05/2025 @9:06 MP32217 Analysis performed at SGS Scott, LA.

(c) Analysis performed at SGS Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG04@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-8A	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 93.7
Project: ENSOCOWR: Dutch Lake 22-34H	

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium ^a	52.1	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium ^a	10.9	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium ^a	< 7.5	7.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: L:MA31263

(2) Prep QC Batch: L:MP32217

(a) Analysis performed at SGS Scott, LA.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG04@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-8A	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 93.7
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.240		ratio	1	12/05/25 23:05	ALA	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: BG04@6'		Date Sampled: 12/01/25
Lab Sample ID: DA77646-8B		Date Received: 12/01/25
Matrix: SO - Soil		Percent Solids: 93.7
Project: ENSOCOWR: Dutch Lake 22-34H		

Hot Water Soluble Boron Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Boron	< 0.25	0.25	mg/l	1	12/02/25	12/10/25 BR	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19946

(2) Prep QC Batch: MP44756

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG05@3'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-9	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 96.7
Project: ENSOCOWR: Dutch Lake 22-34H	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	2.2	0.21	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Barium	46.6	2.1	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Cadmium	< 0.10	0.10	mg/kg	10	12/02/25	12/11/25 GS	SW846 6020B ²	SW846 3050B ³
Copper	3.9	2.1	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Lead	3.6	0.52	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Nickel	3.1	2.1	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Selenium	< 0.21	0.21	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Silver	< 0.10	0.10	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Zinc	12.4	10	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA19944
- (2) Instrument QC Batch: MA19956
- (3) Prep QC Batch: MP44753

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG05@3'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-9	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 96.7
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	96.7		%	1	12/01/25	LM	SM2540G-2011 M
pH-saturated paste method							
pH ^a	8.00		su	1	12/05/25 16:06	ALA	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity ^b	0.12	0.010	mmhos/cm	1	12/05/25 11:11	ALA	SM 2510B-2011 MOD
Chromium, Hexavalent ^c	< 0.43	0.43	mg/kg	1	12/26/25 22:55	ANJ	SW846 3060A/7199

(a) Saturated paste was generated on 12/05/2025 0906 Analysis performed at SGS Scott, LA.

(b) Saturated paste was generated on 12/05/2025 @9:06 MP32217 Analysis performed at SGS Scott, LA.

(c) Analysis performed at SGS Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG05@3'		Date Sampled: 12/01/25
Lab Sample ID: DA77646-9A		Date Received: 12/01/25
Matrix: SO - Soil		Percent Solids: 96.7
Project: ENSOCOWR: Dutch Lake 22-34H		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium ^a	42.5	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium ^a	3.59	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium ^a	< 7.5	7.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: L:MA31263

(2) Prep QC Batch: L:MP32217

(a) Analysis performed at SGS Scott, LA.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG05@3'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-9A	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 96.7
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.0878		ratio	1	12/05/25 23:09	ALA	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: BG05@3'	
Lab Sample ID: DA77646-9B	Date Sampled: 12/01/25
Matrix: SO - Soil	Date Received: 12/01/25
	Percent Solids: 96.7
Project: ENSOCOWR: Dutch Lake 22-34H	

Hot Water Soluble Boron Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Boron	< 0.25	0.25	mg/l	1	12/02/25	12/10/25 BR	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19946

(2) Prep QC Batch: MP44756

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG05@6'		Date Sampled: 12/01/25
Lab Sample ID: DA77646-10		Date Received: 12/01/25
Matrix: SO - Soil		Percent Solids: 96.3
Project: ENSOCOWR: Dutch Lake 22-34H		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	2.6	0.19	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Barium	69.5	1.9	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Cadmium	< 0.094	0.094	mg/kg	10	12/02/25	12/11/25 GS	SW846 6020B ²	SW846 3050B ³
Copper	4.2	1.9	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Lead	5.3	0.47	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Nickel	4.0	1.9	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Selenium	< 0.19	0.19	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Silver	< 0.094	0.094	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³
Zinc	15.8	9.4	mg/kg	10	12/02/25	12/10/25 GS	SW846 6020B ¹	SW846 3050B ³

(1) Instrument QC Batch: MA19944

(2) Instrument QC Batch: MA19956

(3) Prep QC Batch: MP44753

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG05@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-10	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 96.3
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	96.3		%	1	12/01/25	LM	SM2540G-2011 M
pH-saturated paste method							
pH ^a	7.31		su	1	12/05/25 16:06	ALA	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity ^b	0.096	0.010	mmhos/cm	1	12/05/25 11:11	ALA	SM 2510B-2011 MOD
Chromium, Hexavalent ^c	< 0.41	0.41	mg/kg	1	12/26/25 23:10	ANJ	SW846 3060A/7199

(a) Saturated paste was generated on 12/05/2025 0906 Analysis performed at SGS Scott, LA.

(b) Saturated paste was generated on 12/05/2025 @9:06 MP32217 Analysis performed at SGS Scott, LA.

(c) Analysis performed at SGS Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG05@6'		Date Sampled: 12/01/25
Lab Sample ID: DA77646-10A		Date Received: 12/01/25
Matrix: SO - Soil		Percent Solids: 96.3
Project: ENSOCOWR: Dutch Lake 22-34H		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium ^a	39.9	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium ^a	2.96	1.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium ^a	< 7.5	7.5	mg/l	1	12/05/25	12/05/25 ALA	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: L:MA31263

(2) Prep QC Batch: L:MP32217

(a) Analysis performed at SGS Scott, LA.

RL = Reporting Limit

Report of Analysis

Client Sample ID: BG05@6'	Date Sampled: 12/01/25
Lab Sample ID: DA77646-10A	Date Received: 12/01/25
Matrix: SO - Soil	Percent Solids: 96.3
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.122		ratio	1	12/05/25 23:14	ALA	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: BG05@6'	
Lab Sample ID: DA77646-10B	Date Sampled: 12/01/25
Matrix: SO - Soil	Date Received: 12/01/25
	Percent Solids: 96.3
Project: ENSOCOWR: Dutch Lake 22-34H	

Hot Water Soluble Boron Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Boron	< 0.25	0.25	mg/l	1	12/02/25	12/10/25 BR	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19946

(2) Prep QC Batch: MP44756

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

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: DA77646
Account: CIVITCOW - Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44753
Matrix Type: SOLID

Methods: SW846 6020B
Units: mg/kg

Prep Date: 12/02/25

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.52	5		
Antimony	0.40	.01	.05		
Arsenic	0.20	.05	.05	0.035	<0.20
Barium	2.0	.096	.24	0.11	<2.0
Beryllium	0.20	.077	.04		
Boron	40	18	10		
Cadmium	0.10	.03	.04	0.0082	<0.10
Calcium	400	25	30		
Chromium	2.0	.087	.6		
Cobalt	0.20	.04	.025		
Copper	2.0	.05	.25	1.4	* (a)
Iron	20	1.6	15		
Lead	0.50	.094	.2	-0.043	<0.50
Magnesium	100	10	10		
Manganese	1.0	.079	.2		
Molybdenum	1.0	.037	.27		
Nickel	2.0	.098	.2	0.037	<2.0
Phosphorus	60	7.6	25		
Potassium	200	2	25		
Selenium	0.20	.05	.05	-0.00062	<0.20
Silver	0.10	.0081	.03	-0.00030	<0.10
Sodium	500	10	30		
Strontium	20	.1	1		
Thallium	0.20	.032	.04		
Tin	10	.22	4		
Titanium	2.0	.05	.3		
Uranium	0.20	.015	.1		
Vanadium	1.0	.14	.2		
Zinc	10	.05	1	1.1	<10

Associated samples MP44753: DA77646-1, DA77646-2, DA77646-3, DA77646-4, DA77646-5, DA77646-6, DA77646-7, DA77646-8, DA77646-9, DA77646-10

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Element detected in the MB greater than 1/2 the reporting limit. Reported samples are below 1/2 the project screening limit.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA77646
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44753
 Matrix Type: SOLID

Methods: SW846 6020B
 Units: mg/kg

Prep Date: 12/02/25

Metal	DA77643-4C Original MS		Spike/lot ICPMS6	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	2.5	106	107	96.5	75-125
Barium	86.1	304	215	103.0	75-125
Beryllium					
Boron					
Cadmium	0.12	56.8	53.6	105.7	75-125
Calcium					
Chromium					
Cobalt					
Copper	8.2	68.1	53.6	112.8	75-125
Iron					
Lead	5.7	113	107	100.0	75-125
Magnesium					
Manganese					
Molybdenum					
Nickel	7.2	57.7	53.6	94.9	75-125
Phosphorus					
Potassium					
Selenium	0.17	105	107	97.7	75-125
Silver	0.020	21.1	21.5	98.3	75-125
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	26.5	81.7	53.6	102.9	75-125

Associated samples MP44753: DA77646-1, DA77646-2, DA77646-3, DA77646-4, DA77646-5, DA77646-6, DA77646-7, DA77646-8, DA77646-9, DA77646-10

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

5.1.2
5

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA77646
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44753
 Matrix Type: SOLID

Methods: SW846 6020B
 Units: mg/kg

Prep Date: 12/02/25

Metal	DA77643-4C Original MSD		SpikeLot ICPMS6 % Rec		MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	2.5	106	108	95.6	0.0	20
Barium	86.1	298	217	99.3	2.0	20
Beryllium						
Boron						
Cadmium	0.12	56.7	54.1	104.5	0.2	20
Calcium						
Chromium						
Cobalt						
Copper	8.2	59.0	54.1	94.9	14.3	20
Iron						
Lead	5.7	112	108	98.2	0.9	20
Magnesium						
Manganese						
Molybdenum						
Nickel	7.2	57.9	54.1	94.4	0.3	20
Phosphorus						
Potassium						
Selenium	0.17	104	108	95.9	1.0	20
Silver	0.020	21.0	21.7	96.9	0.5	20
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	26.5	82.7	54.1	103.8	1.2	20

Associated samples MP44753: DA77646-1, DA77646-2, DA77646-3, DA77646-4, DA77646-5, DA77646-6, DA77646-7, DA77646-8, DA77646-9, DA77646-10

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

5.1.2
5

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA77646
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44753
 Matrix Type: SOLID

Methods: SW846 6020B
 Units: mg/kg

Prep Date: 12/02/25

Metal	BSP Result	Spikelot ICPMS6	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	99.7	100	99.7	80-120
Barium	201	200	100.5	80-120
Beryllium				
Boron				
Cadmium	52.7	50	105.4	80-120
Calcium				
Chromium				
Cobalt				
Copper	51.0	50	102.0	80-120
Iron				
Lead	97.9	100	97.9	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel	49.6	50	99.2	80-120
Phosphorus				
Potassium				
Selenium	100	100	100.0	80-120
Silver	19.2	20	96.0	80-120
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	50.9	50	101.8	80-120

Associated samples MP44753: DA77646-1, DA77646-2, DA77646-3, DA77646-4, DA77646-5, DA77646-6, DA77646-7, DA77646-8, DA77646-9, DA77646-10

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: DA77646
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44753
 Matrix Type: SOLID

Methods: SW846 6020B
 Units: ug/l

Prep Date: 12/02/25

Metal	DA77643-4C Original SDL 10:50%DIF		QC Limits
Aluminum			
Antimony			
Arsenic	25.7	26.3	2.9 0-20
Barium	871	781	7.1 0-20
Beryllium			
Boron			
Cadmium	1.31	0.00	100.0(a) 0-20
Calcium			
Chromium			
Cobalt			
Copper	82.7	68.6	11.4 0-20
Iron			
Lead	57.3	49.9	13.0 0-20
Magnesium			
Manganese			
Molybdenum			
Nickel	69.0	68.0	1.5 0-20
Phosphorus			
Potassium			
Selenium	1.77	0.00	100.0(a) 0-20
Silver	0.238	0.00	100.0(a) 0-20
Sodium			
Strontium			
Thallium			
Tin			
Titanium			
Uranium			
Vanadium			
Zinc	285	243	9.4 0-20

Associated samples MP44753: DA77646-1, DA77646-2, DA77646-3, DA77646-4, DA77646-5, DA77646-6, DA77646-7, DA77646-8, DA77646-9, DA77646-10

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).

5.1.4
5

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: DA77646
Account: CIVITCOW - Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44756
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 12/02/25

Metal	RL	IDL	MDL	MB raw	final
Aluminum	500	9.9	75		
Antimony	150	30	34		
Arsenic	130	11	23		
Barium	50	.95	6.5		
Beryllium	50	.5	6.5		
Boron	250	6.3	32	-4.5	<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		
Phosphorus	500	58	80		
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 MP44756: DA77646-1B, DA77646-2B, DA77646-3B, DA77646-4B, DA77646-5B, DA77646-6B, DA77646-7B, DA77646-8B, DA77646-9B, DA77646-10B

Results < IDL are shown as zero for calculation purposes

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: DA77646
Account: CIVITCOW - Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

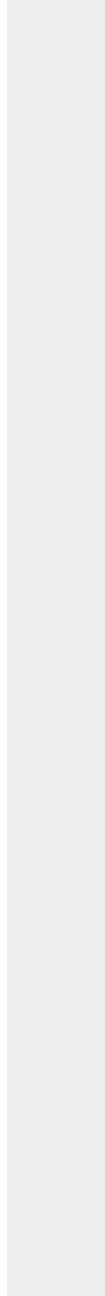
QC Batch ID: MP44756
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 12/02/25

Metal	RL	IDL	MDL	MB raw	final
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(*) Outside of QC limits
(anr) Analyte not requested



5.2.1
5

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA77646
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44756
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/02/25 12/02/25

Metal	DA77643-4B Original	DUP	RPD	QC Limits	DA77643-4B Original MS	Spikelot ICPALL6	% Rec	QC Limits	
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron	125	114	9.2	0-20	125	10200	10000	100.8	75-125
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Lithium									
Magnesium									
Manganese									
Molybdenum									
Nickel									
Phosphorus									
Potassium									
Selenium									
Silicon									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Uranium									
Vanadium									
Zinc									

Associated samples MP44756: DA77646-1B, DA77646-2B, DA77646-3B, DA77646-4B, DA77646-5B, DA77646-6B, DA77646-7B, DA77646-8B, DA77646-9B, DA77646-10B

Results < IDL are shown as zero for calculation purposes

5.2.2
5

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA77646
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44756
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/02/25 12/02/25

Metal	DA77643-4B Original	DUP	RPD	QC Limits	DA77643-4B Original MS	Spikelot ICPALL6	% Rec	QC Limits
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(*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

5.2.2
5

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA77646
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44756
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/02/25

Metal	BSP Result	Spikelot ICPALL6	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron	9750	10000	97.5	80-120
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP44756: DA77646-1B, DA77646-2B, DA77646-3B, DA77646-4B, DA77646-5B, DA77646-6B, DA77646-7B, DA77646-8B, DA77646-9B, DA77646-10B

Results < IDL are shown as zero for calculation purposes

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA77646
Account: CIVITCOW - Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

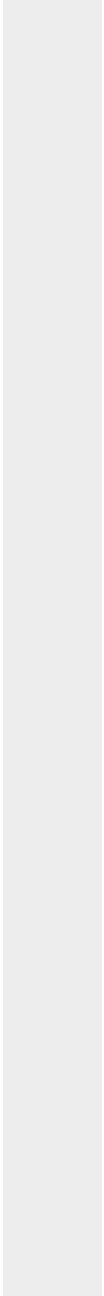
QC Batch ID: MP44756
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 12/02/25

Metal	BSP Result	Spikelot ICPALL6	% Rec	QC Limits
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(*) Outside of QC limits
(anr) Analyte not requested



5.2.3
5

SERIAL DILUTION RESULTS SUMMARY

Login Number: DA77646
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44756
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/02/25

Metal	DA77643-4B Original SDL 1:5	%DIF	QC Limits
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium			
Boron	25.0	38.0	52.0 (a) 0-10
Cadmium			
Calcium			
Chromium			
Cobalt			
Copper			
Iron			
Lead			
Lithium			
Magnesium			
Manganese			
Molybdenum			
Nickel			
Phosphorus			
Potassium			
Selenium			
Silicon			
Silver			
Sodium			
Strontium			
Thallium			
Tin			
Titanium			
Uranium			
Vanadium			
Zinc			

Associated samples MP44756: DA77646-1B, DA77646-2B, DA77646-3B, DA77646-4B, DA77646-5B, DA77646-6B, DA77646-7B, DA77646-8B, DA77646-9B, DA77646-10B

Results < IDL are shown as zero for calculation purposes

SERIAL DILUTION RESULTS SUMMARY

Login Number: DA77646
Account: CIVITCOW - Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44756
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 12/02/25

	DA77643-4B		QC
Metal	Original SDL 1:5	%DIF	Limits

(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

5.2.4
5

Misc. Forms

Custody Documents and Other Forms

(SGS Scott, LA)

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY
SGS North America Inc. - Wheat Ridge
 4036 Youngfield Street, Wheat Ridge, CO 80033
 TEL: 303-425-6021 FAX: 303-425-6854
 www.sgs.com/ehsusa

FED-EX Tracking #		Bottle Order Control #					
SGS Quote #		SGS Job # DA77646					
Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)		Matrix Codes	
Company Name SGS North America Inc.		Project Name ENSOCOWR: Dutch Lake 22-34H				DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge	
Street Address 4036 Youngfield Street		Street				SED-Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB- Rinse Blank TB-Trip Blank	
City State Zip Wheat Ridge, CO 8003		City State					
Project Contact E-mail Kristin.Degraw@sgs.com		Project #		Street Address			
Phone # 303-425-6021		Fax #		Client Purchase Order #		City State Zip	
Sampler(s) Name(s) MB		Phone		Project Manager		Attention:	
SGS Sample #		Field ID / Point of Collection		MECH/ID/ Vial #		Collection	
						Date Time Sampled by Matrix # of bottles	
						HCl NaOH NH3 HNO3 H2SO4 H2O2 DI Water METH ENCORE	
						Number of preserved Bottles	
						PASTE SARCA SARMG SARNA PH-SAT/PASTE SCON	
						LAB USE ONLY	
1		BG01@3'				12/1/25 8:50:00 AM MB SO	
1A		BG01@3'				12/1/25 8:50:00 AM MB SO	
2		BG01@6'				12/1/25 9:12:00 AM MB SO	
2A		BG01@6'				12/1/25 9:12:00 AM MB SO	
3		BG02@3'				12/1/25 9:20:00 AM MB SO	
3A		BG02@3'				12/1/25 9:20:00 AM MB SO	
4		BG02@6'				12/1/25 9:40:00 AM MB SO	
4A		BG02@6'				12/1/25 9:40:00 AM MB SO	
5		BG03@3'				12/1/25 9:50:00 AM MB SO	
5A		BG03@3'				12/1/25 9:50:00 AM MB SO	
6		BG03@6'				12/1/25 10:08:00 AM MB SO	
6A		BG03@6'				12/1/25 10:08:00 AM MB SO	
Turnaround Time (Business days)		Approved By (SGS PM) / Date:		Data Deliverable Information		Comments / Special Instructions	
<input type="checkbox"/> Standard 10 Day (business) <input type="checkbox"/> 5 Business Days RUSH <input type="checkbox"/> 3 Business Days RUSH <input type="checkbox"/> 2 Business Days RUSH <input type="checkbox"/> 1 Business Day EMERGENCY <input checked="" type="checkbox"/> other Due 12/15/2025 <small>Emergency & Rush T/A data available via Lablink. Approval needed for RUSH/Emergency TAT</small>		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> REDT1 (Level 3) <input type="checkbox"/> FULT1 (Level 4) <input type="checkbox"/> Commercial "C" <small>Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial "C" = Results + QC Summary + Partial Raw data</small>		<input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other <input checked="" type="checkbox"/> X UC		BW-75A 3W2 http://www.sgs.com/en/terms-and-conditions	
<p align="center">Sample Custody must be documented below each time samples change possession, including courier delivery.</p>							
Relinquished by Sampler: DA		Date Time: 11/11/14		Received By: SWA		Date Time: 12-03-25	
1				1		2	
Relinquished by Sampler: DA		Date Time: 12-03-25 12:35		Received By: SWA		Date Time: 12-03-25	
3				3		4	
Relinquished by Sampler:		Date Time:		Received By:		Date Time:	
5				5		4	
Custody Seal #		Intact		Preserved where applicable		On Ice	
CSN 001		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
		Not Intact		Therm. ID		Cooler Temp.	
						1.0/1.1/1.2 1.4 (SWA)	

DA77646: Chain of Custody
 Page 1 of 8
 SGS Scott, LA





CHAIN OF CUSTODY

SGS North America Inc. - Wheat Ridge
4036 Youngfield Street, Wheat Ridge, CO 80033
TEL: 303-425-6021 FAX: 303-425-6854
www.sgs.com/ehsusa

Table with 2 columns: FED-EX Tracking #, Bottle Order Control #; SGS Quote #, SGS Job # DA77646

Client / Reporting Information, Project Information, Requested Analysis (see TEST CODE sheet), Matrix Codes

Street Address, City, State, Zip, Billing Information (if different from Report to), Project #, Street Address, Project Manager, Attention:

Table with columns: SGS Sample #, Field ID / Point of Collection, MECHDI Vial #, Date, Time, Matrix, # of bottles, HCl, NaOH, HNO3, H2SO4, H2O2, DI Water, MECH, ENCORE, PASTE, SARCA, SARMO, SARNA, PH-SATPASTE, SCON, LAB USE ONLY

Turnaround Time (Business days), Data Deliverable Information, Comments / Special Instructions, Approved By (SGS PM) / Date, Commercial "A" (Level 1), Commercial "B" (Level 2), REDT1 (Level 3), FULT1 (Level 4), Commercial "C", State Forms, EDD Format, Other

Sample Custody must be documented below each time samples change possession, including courier delivery. Table with columns: Relinquished by, Date Time, Received By, Date Time

Custody Seal #, Intact, Not Intact, Preserved when Applicable, Therm. ID, On Ice, Cooler Temp. 1.0/1.1/1.2, 1.4(2024)

DA77646: Chain of Custody

Page 2 of 8



6.1 6

Printed on: 02 DEC 13:20

SOUTHWEST AIRLINES

526 DEN 3252 2965

HOU

PC#	DG	LOT WT
1 OF 4	G	310 LB (140.6 KG)

Dec: MW 3512 02 DEC 14:25

STN FLT DATE EID LOT 01

NFG

PC ID: 0001
PC WT: 78LB

35502965 0001

DA77646: Chain of Custody
Page 4 of 8

SOUTHWEST AIRLINES



526 DEN 3252 2965

Printed on:
02 DEC 13:23

HOU

PC#	DG	LOT WT
3 OF 4	G	310 LB (140.6 KG)

DEN WN 3512 02 DEC 14:23

STN FLT DATE ETD LOT 01



PC ID: 0003
PC WT: 77LB
526 32522965 0003

NFG

Printed on:
02 DEC 13:28

SOUTHWEST AIRLINES

526 DEN 3252 2965

HOU

PC# 2 OF 4	DG G	LOT WT 310 LB (140.6 KG)
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DEN WN 3512 02 DEC 14:25

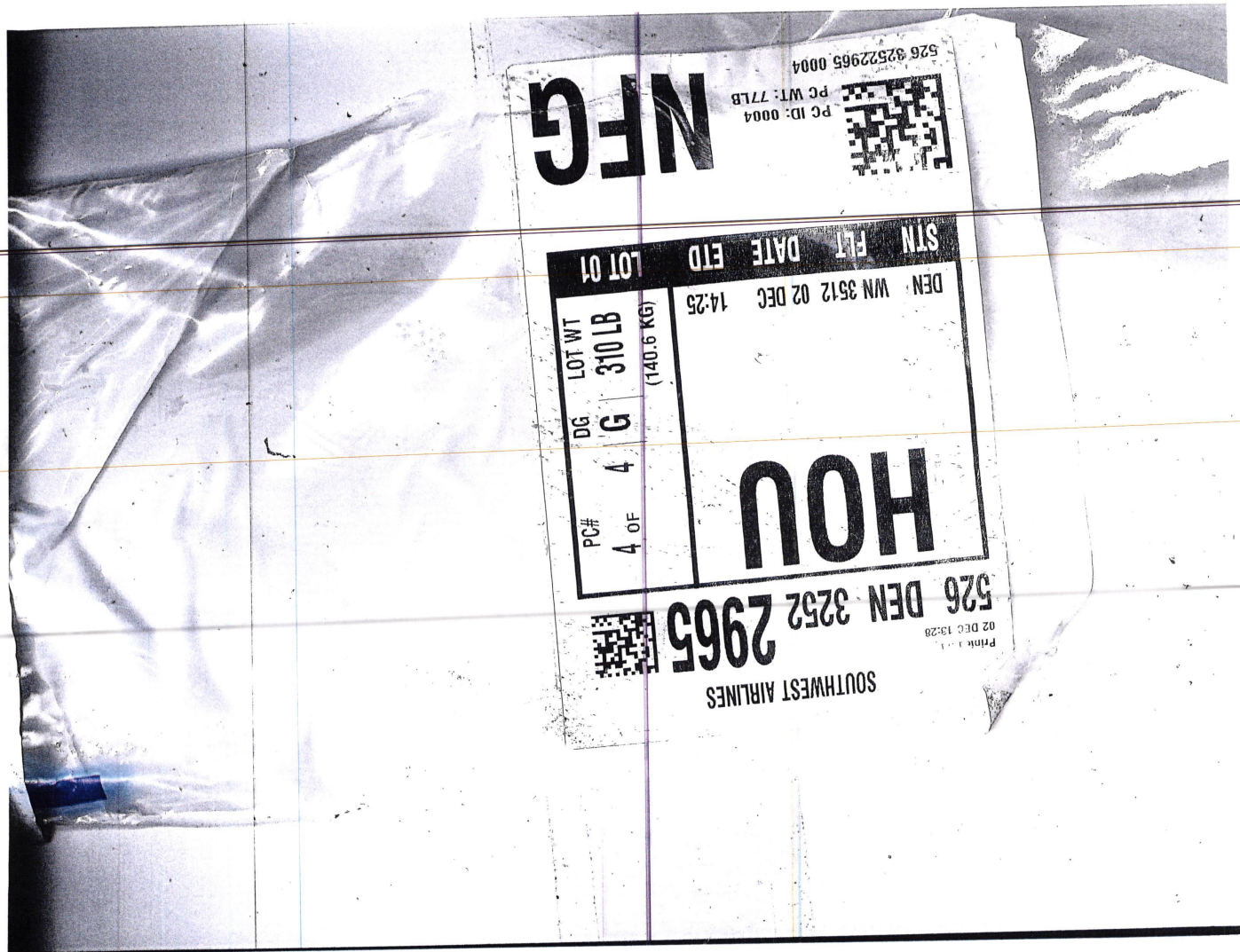
STN FLT DATE ETD LOT 01

NFC

PC ID: 0002
PC WT: 78LB

526 32522965 0002

DA77646: Chain of Custody
Page 6 of 8



6.1
6

SGS Sample Receipt Summary

Job Number: da77646

Client: SGS CO

Project: ENSOCOWR:DUTCH LAKE 22-34H

Date / Time Received: 12/3/2025 7:00:00 AM

Delivery Method: SWA/SGS DRIVER

Airbill #'s: 526325229650001/0002/0003/0004

Cooler Temps (Raw Measured) °C: Cooler 1: (1.0); Cooler 2: (1.1); Cooler 3: (1.2); Cooler 4: (1.4);

Cooler Temps (Corrected) °C: Cooler 1: (1.0); Cooler 2: (1.1); Cooler 3: (1.2); Cooler 4: (1.4);

<u>Cooler Security</u>	<u>Y or N</u>		<u>Y or N</u>	
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. Smpl Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	<u>IRGUN</u>	
3. Cooler media:	<u>Ice (direct contact)</u>	
4. No. Coolers:	<u>4</u>	

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
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"/>

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
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"/>

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
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:	<u>Intact</u>		

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
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: _____	pH 12+: _____	Other: (Specify) _____
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Comments

SM089-03
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DA77646: Chain of Custody

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Metals Analysis

QC Data Summaries

(SGS Scott, LA)

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: DA77646
Account: ALMS - SGS Wheat Ridge, CO
Project: CIVITCOW: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP32217
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 12/05/25

Metal	RL	IDL	MDL	MB raw	final
Calcium	1500	68	480	-3.2	<1500
Magnesium	1500	360	600	146	<1500
Sodium	7500	500	1700	96.6	<7500

Associated samples MP32217: DA77646-1A, DA77646-2A, DA77646-3A, DA77646-4A, DA77646-5A, DA77646-6A, DA77646-7A, DA77646-8A, DA77646-9A, DA77646-10A

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA77646
 Account: ALMS - SGS Wheat Ridge, CO
 Project: CIVITCOW: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP32217
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/05/25

Metal	DA77643-4A Original MS	Spikelot LA29BSPIKE% Rec	QC Limits
Calcium	56500 113000	64000 88.3	75-125
Magnesium	9080 37900	32000 90.1	75-125
Sodium	6830 1580000	1600000 98.3	75-125

Associated samples MP32217: DA77646-1A, DA77646-2A, DA77646-3A, DA77646-4A, DA77646-5A, DA77646-6A, DA77646-7A, DA77646-8A, DA77646-9A, DA77646-10A

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA77646
 Account: ALMS - SGS Wheat Ridge, CO
 Project: CIVITCOW: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP32217
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/05/25

Metal	DA77643-4A Original MSD	Spikelot LA29BSPIKE% Rec	MSD RPD	QC Limit
Calcium	56500	114000	64000 89.8	0.9 20
Magnesium	9080	38300	32000 91.3	1.0 20
Sodium	6830	1580000	1600000 98.3	0.0 20

Associated samples MP32217: DA77646-1A, DA77646-2A, DA77646-3A, DA77646-4A, DA77646-5A, DA77646-6A, DA77646-7A, DA77646-8A, DA77646-9A, DA77646-10A

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA77646
 Account: ALMS - SGS Wheat Ridge, CO
 Project: CIVITCOW: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP32217
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 12/05/25

Metal	BSP Result	Spikelot LA29B SPIKE	% Rec	QC Limits
Calcium	64600	64000	100.9	80-120
Magnesium	30500	32000	95.3	80-120
Sodium	1700000	1600000	106.3	80-120

Associated samples MP32217: DA77646-1A, DA77646-2A, DA77646-3A, DA77646-4A, DA77646-5A, DA77646-6A, DA77646-7A, DA77646-8A, DA77646-9A, DA77646-10A

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

General Chemistry

QC Data Summaries

(SGS Scott, LA)

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: DA77646
Account: ALMS - SGS Wheat Ridge, CO
Project: CIVITCOW: ENSOCOWR: Dutch Lake 22-34H

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Specific Conductivity	GN35416			mmhos/cm	xxxxxxxx	1.4	99.4(a)	90-110%
pH	GN35386			su	xxxxxxx	7.05	100.7(b)	99.1-100.9%

Associated Samples:

Batch GN35386: DA77646-1, DA77646-2, DA77646-3, DA77646-4, DA77646-5, DA77646-6, DA77646-7, DA77646-8, DA77646-9, DA77646-10

Batch GN35416: DA77646-1, DA77646-2, DA77646-3, DA77646-4, DA77646-5, DA77646-6, DA77646-7, DA77646-8, DA77646-9, DA77646-10

(*) Outside of QC limits

(a) Saturated paste was generated on 12/05/2025 @9:06 MP32217

(b) Saturated paste was generated on 12/05/2025 0906



DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA77646
Account: ALMS - SGS Wheat Ridge, CO
Project: CIVITCOW: ENSOCOWR: Dutch Lake 22-34H

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Specific Conductivity	GN35416	DA77646-4	mmhos/cm	0.11	0.11(a)	0.3(a)	0-10%
pH	GN35386	DA77646-7	su	8.18	8.18(b)	0.0(b)	0-20%

Associated Samples:

Batch GN35386: DA77646-1, DA77646-2, DA77646-3, DA77646-4, DA77646-5, DA77646-6, DA77646-7, DA77646-8, DA77646-9, DA77646-10

Batch GN35416: DA77646-1, DA77646-2, DA77646-3, DA77646-4, DA77646-5, DA77646-6, DA77646-7, DA77646-8, DA77646-9, DA77646-10

(*) Outside of QC limits

(a) Saturated paste was generated on 12/05/2025 @9:06 MP32217

(b) Saturated paste was generated on 12/05/2025 0906

8.2

8

Misc. Forms

Custody Documents and Other Forms

(SGS Dayton, NJ)

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY
 SGS North America Inc. - Wheat Ridge
 4036 Youngfield Street, Wheat Ridge, CO 80033
 TEL: 303-425-6021 FAX: 303-425-6854
 www.sgs.com/ehsusa

SO

FED-EX Tracking 2903 6299 663 SGS Quote #		Bottle Order Control # DA77646	
Client / Reporting Information Company Name: SGS North America Inc. Street Address: 4036 Youngfield Street City: Wheat Ridge, CO 80033 Project Contact: Kristin Degraw@sgs.com Phone #: 303-425-6021		Project Information Project Name: ENSCOWR: Dutch Lake 22-34H Billing Information (if different from Report to) Project #: _____ Client Purchase Order #: _____	
Requested Analysis (see TEST CODE sheet)		Matrix Codes DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	
Collection Date: 12/1/25 Time: 8:50:00 AM Sampled by: MB Matrix: SO		Number of preserved Bottles HCl, NaOH, HNO3, H2SO4, H2O2, DI Water, MCH, ENCORE	
Field ID / Point of Collection 1 BG01@3' 2 BG01@6' 3 BG02@3' 4 BG02@6' 5 BG03@3' 6 BG03@6' 7 BG04@3' 8 BG04@6' 9 BG05@3' 10 BG05@6'		Requested Analysis XCR07109 X X X X X X X X X X	
Turnaround Time (Business days)		Data Deliverable Information <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> REDT1 (Level 3) <input type="checkbox"/> FULT1 (Level 4) <input type="checkbox"/> Commercial "C"	
<input type="checkbox"/> Standard 10 Day (business) <input type="checkbox"/> 5 Business Days RUSH <input type="checkbox"/> 3 Business Days RUSH <input type="checkbox"/> 2 Business Days RUSH <input type="checkbox"/> 1 Business Day EMERGENCY <input checked="" type="checkbox"/> other Due 12/15/2025		<input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other <input checked="" type="checkbox"/> CL	
Approved By (SGS PM) / Date: _____		Initial Assessment <i>NPB</i> Label Verification	
Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished by Sampler: <i>AV</i> Date Time: 12/1/25	Received By: <i>fx</i> Date Time: 12/3/25	Relinquished By: <i>fx</i> Date Time: 1030	Received By: <i>Almond/Anthony</i> Date Time: 12/3/25
Relinquished by: _____ Date Time: _____	Received By: _____ Date Time: _____	Relinquished By: _____ Date Time: _____	Received By: _____ Date Time: _____
Custody Seal # _____		Preserved where applicable <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact	
Emergancy & Rush TIA data available via Lablink Approval needed for RUSH/Emergency TAT		Therm. ID: _____ On Ice: <input checked="" type="checkbox"/> Cooler Temp. <i>2.0°C (36°)</i>	

9.1
9

DA77646: Chain of Custody
 Page 1 of 2
 SGS Dayton, NJ



SGS Sample Receipt Summary

Job Number: DA77646

Client: SGS NORTH AMERICA INC

Project: _____

Date / Time Received: 12/3/2025 10:30:00 AM

Delivery Method: FEDEX

Airbill #'s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.1);

<u>Cooler Security</u>	<u>Y or N</u>		<u>Y or N</u>	
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"/>

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

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input 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"/>

<u>Sample Integrity - Documentation</u>	<u>Y or N</u>	
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"/>

<u>Sample Integrity - Condition</u>	<u>Y or N</u>	
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:	<u>Intact</u>	

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
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: <u>231619</u>	pH 12+: <u>203117A</u>	Other: (Specify) _____
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Comments

SM089-03
Rev. Date 12/7/17

DA77646: Chain of Custody

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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: DA77646
Account: ALMS - SGS Wheat Ridge, CO
Project: CIVITCOW: ENSOCOWR: Dutch Lake 22-34H

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chromium, Hexavalent	GP66459/GN77734	0.40	0.0	mg/kg	40	39.9	99.8	80-120%
Chromium, Hexavalent	GP66459/GN77734			mg/kg	1160	1190	102.2	80-120%

Associated Samples:

Batch GP66459: DA77646-1, DA77646-2, DA77646-3, DA77646-4, DA77646-5, DA77646-6, DA77646-7, DA77646-8, DA77646-9, DA77646-10

(*) Outside of QC limits

10.1
10

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA77646
Account: ALMS - SGS Wheat Ridge, CO
Project: CIVITCOW: ENSOCOWR: Dutch Lake 22-34H

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chromium, Hexavalent	GP66459/GN77734	DA77646-2	mg/kg	0.0	0.0	0.0	0-20%

Associated Samples:

Batch GP66459: DA77646-1, DA77646-2, DA77646-3, DA77646-4, DA77646-5, DA77646-6, DA77646-7, DA77646-8, DA77646-9, DA77646-10

(*) Outside of QC limits

10.2
10

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA77646
Account: ALMS - SGS Wheat Ridge, CO
Project: CIVITCOW: ENSOCOWR: Dutch Lake 22-34H

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chromium, Hexavalent	GP66459/GN77734	DA77646-2	mg/kg	0.0	41.8	36.1	86.4 (a)	75-125%
Chromium, Hexavalent	GP66459/GN77734	DA77646-2	mg/kg	0.0	979	965	98.6 (b)	75-125%

Associated Samples:

Batch GP66459: DA77646-1, DA77646-2, DA77646-3, DA77646-4, DA77646-5, DA77646-6, DA77646-7, DA77646-8, DA77646-9, DA77646-10

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Good recovery on soluble XCR matrix spike. Good recovery (85.93%) on the post-spike.

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

10.3
10