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Automated Report

Technical Report for

Civitas

ENSOCOWR: Dutch Lake 22-34H

09C2407120

SGS Job Number: DA77508

Sampling Date: 11/21/25

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: 90



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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Sample Summary

Civitas

Job No: DA77508

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
DA77508-1	11/21/25	09:19 EG	11/21/25	SO	Soil	AST1-B01@0.5'
DA77508-1A	11/21/25	09:19 EG	11/21/25	SO	Soil	AST1-B01@0.5'
DA77508-1B	11/21/25	09:19 EG	11/21/25	SO	Soil	AST1-B01@0.5'
DA77508-1C	11/21/25	09:19 EG	11/21/25	SO	Soil	AST1-B01@0.5'
DA77508-2	11/21/25	09:26 EG	11/21/25	SO	Soil	AST2-B01@0.5'
DA77508-2A	11/21/25	09:26 EG	11/21/25	SO	Soil	AST2-B01@0.5'
DA77508-2B	11/21/25	09:26 EG	11/21/25	SO	Soil	AST2-B01@0.5'
DA77508-2C	11/21/25	09:26 EG	11/21/25	SO	Soil	AST2-B01@0.5'
DA77508-3	11/21/25	09:38 EG	11/21/25	SO	Soil	AST3-B01@0.5'
DA77508-3A	11/21/25	09:38 EG	11/21/25	SO	Soil	AST3-B01@0.5'
DA77508-3B	11/21/25	09:38 EG	11/21/25	SO	Soil	AST3-B01@0.5'
DA77508-3C	11/21/25	09:38 EG	11/21/25	SO	Soil	AST3-B01@0.5'
DA77508-4	11/21/25	09:48 EG	11/21/25	SO	Soil	AST4-B01@0.5'

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



Sample Summary

(continued)

Civitas

Job No: DA77508

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
DA77508-4A	11/21/25	09:48 EG	11/21/25	SO	Soil	AST4-B01@0.5'
DA77508-4B	11/21/25	09:48 EG	11/21/25	SO	Soil	AST4-B01@0.5'
DA77508-4C	11/21/25	09:48 EG	11/21/25	SO	Soil	AST4-B01@0.5'

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

Summary of Hits

Job Number: DA77508
Account: Civitas
Project: ENSOCOWR: Dutch Lake 22-34H
Collected: 11/21/25

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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DA77508-1 AST1-B01@0.5'

No hits reported in this sample.

DA77508-1A AST1-B01@0.5'

Calcium	42.4	6.0		mg/l	SW846 6010C
Magnesium	7.35	3.0		mg/l	SW846 6010C
Sodium	8.85	6.0		mg/l	SW846 6010C
Sodium Adsorption Ratio ^a	0.330			ratio	USDA HANDBOOK 60

DA77508-1B AST1-B01@0.5'

No hits reported in this sample.

DA77508-1C AST1-B01@0.5'

Arsenic	3.7	0.18		mg/kg	SW846 6020B
Barium	78.3	1.8		mg/kg	SW846 6020B
Cadmium	0.13	0.091		mg/kg	SW846 6020B
Copper	8.9	1.8		mg/kg	SW846 6020B
Lead	5.2	0.45		mg/kg	SW846 6020B
Nickel	4.0	1.8		mg/kg	SW846 6020B
Zinc	16.3	9.1		mg/kg	SW846 6020B
pH ^b	8.04			su	WREP-125,4E-SATPASTE
Specific Conductivity ^b	0.31	0.0010		mmhos/cm	SM 2510B-2011 MOD

DA77508-2 AST2-B01@0.5'

TPH-DRO (C10-C28)	278	4.2		mg/kg	SW846-8015C
TPH-ORO (> C28-C36)	412	6.2		mg/kg	SW846-8015C

DA77508-2A AST2-B01@0.5'

Calcium	130	6.0		mg/l	SW846 6010C
Magnesium	19.7	3.0		mg/l	SW846 6010C
Sodium	15.2	6.0		mg/l	SW846 6010C
Sodium Adsorption Ratio ^a	0.328			ratio	USDA HANDBOOK 60

DA77508-2B AST2-B01@0.5'

No hits reported in this sample.

Summary of Hits

Job Number: DA77508
Account: Civitas
Project: ENSOCOWR: Dutch Lake 22-34H
Collected: 11/21/25

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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DA77508-2C AST2-B01@0.5'

Arsenic		2.2	0.21		mg/kg	SW846 6020B
Barium		37.2	2.1		mg/kg	SW846 6020B
Copper		5.4	2.1		mg/kg	SW846 6020B
Lead		3.5	0.52		mg/kg	SW846 6020B
Nickel		2.5	2.1		mg/kg	SW846 6020B
Zinc		11.9	10		mg/kg	SW846 6020B
pH ^b		7.82			su	WREP-125,4E-SATPASTE
Specific Conductivity ^b		0.82	0.0010		mmhos/cm	SM 2510B-2011 MOD

DA77508-3 AST3-B01@0.5'

1,2,4-Trimethylbenzene		0.0021	0.0021		mg/kg	SW846 8260D
1,3,5-Trimethylbenzene		0.0027	0.0021		mg/kg	SW846 8260D

DA77508-3A AST3-B01@0.5'

Calcium		90.5	6.0		mg/l	SW846 6010C
Magnesium		13.4	3.0		mg/l	SW846 6010C
Sodium		11.7	6.0		mg/l	SW846 6010C
Sodium Adsorption Ratio ^a		0.303			ratio	USDA HANDBOOK 60

DA77508-3B AST3-B01@0.5'

No hits reported in this sample.

DA77508-3C AST3-B01@0.5'

Arsenic		2.9	0.19		mg/kg	SW846 6020B
Barium		39.7	1.9		mg/kg	SW846 6020B
Copper		5.8	1.9		mg/kg	SW846 6020B
Lead		4.2	0.49		mg/kg	SW846 6020B
Nickel		2.7	1.9		mg/kg	SW846 6020B
Zinc		13.7	9.7		mg/kg	SW846 6020B
pH ^b		7.90			su	WREP-125,4E-SATPASTE
Specific Conductivity ^b		0.63	0.0010		mmhos/cm	SM 2510B-2011 MOD

DA77508-4 AST4-B01@0.5'

No hits reported in this sample.

DA77508-4A AST4-B01@0.5'

Calcium		49.7	6.0		mg/l	SW846 6010C
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Summary of Hits

Job Number: DA77508
Account: Civitas
Project: ENSOCOWR: Dutch Lake 22-34H
Collected: 11/21/25

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
		6.51	3.0		mg/l	SW846 6010C
		7.80	6.0		mg/l	SW846 6010C
		0.276			ratio	USDA HANDBOOK 60

DA77508-4B AST4-B01@0.5'

No hits reported in this sample.

DA77508-4C AST4-B01@0.5'

Arsenic	5.5	0.19		mg/kg	SW846 6020B
Barium	53.0	1.9		mg/kg	SW846 6020B
Copper	6.8	1.9		mg/kg	SW846 6020B
Lead	5.2	0.47		mg/kg	SW846 6020B
Nickel	3.1	1.9		mg/kg	SW846 6020B
Zinc	14.6	9.4		mg/kg	SW846 6020B
pH ^b	7.91			su	WREP-125,4E-SATPASTE
Specific Conductivity ^b	0.33	0.0010		mmhos/cm	SM 2510B-2011 MOD

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

(b) Saturated paste was generated on 11/24/25.

Sample Results

Report of Analysis

Report of Analysis

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Client Sample ID: AST1-B01@0.5'	
Lab Sample ID: DA77508-1	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
Method: SW846 8260D	Percent Solids: 94.4
Project: ENSOCOWR: Dutch Lake 22-34H	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4V41815.D	1	12/02/25 11:36	MB	n/a	n/a	V4V2031
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.46 g	5.0 ml
Run #2		

VOA COGCC Table 915 soil list

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	< 0.00097	0.00097	mg/kg	
100-41-4	Ethylbenzene	< 0.0019	0.0019	mg/kg	
108-88-3	Toluene	< 0.0019	0.0019	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	< 0.0019	0.0019	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	< 0.0019	0.0019	mg/kg	
	m,p-Xylene	< 0.0019	0.0019	mg/kg	
95-47-6	o-Xylene	< 0.0019	0.0019	mg/kg	
1330-20-7	Xylene (total)	< 0.0019	0.0019	mg/kg	
	TPH-GRO (C6-C10)	< 0.19	0.19	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%
2037-26-5	Toluene-D8	92%		70-130%
460-00-4	4-Bromofluorobenzene	93%		70-130%
17060-07-0	1,2-Dichloroethane-D4	106%		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

3.1
3

Client Sample ID: AST1-B01@0.5'	
Lab Sample ID: DA77508-1	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
Method: SW846 8270E SW846 3570	Percent Solids: 94.4
Project: ENSOCOWR: Dutch Lake 22-34H	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G006673.D	1	11/27/25 05:14	ZL	11/26/25 14:00	OP29389	E7G251
Run #2							

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

COGCC Table 915-1 PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	< 0.0042	0.0042	mg/kg	
120-12-7	Anthracene	< 0.0042	0.0042	mg/kg	
56-55-3	Benzo(a)anthracene	< 0.0052	0.0052	mg/kg	
205-99-2	Benzo(b)fluoranthene	< 0.0042	0.0042	mg/kg	
207-08-9	Benzo(k)fluoranthene	< 0.0042	0.0042	mg/kg	
50-32-8	Benzo(a)pyrene	< 0.0042	0.0042	mg/kg	
218-01-9	Chrysene	< 0.0042	0.0042	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	< 0.0042	0.0042	mg/kg	
206-44-0	Fluoranthene	< 0.0042	0.0042	mg/kg	
86-73-7	Fluorene	< 0.0042	0.0042	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.0042	0.0042	mg/kg	
90-12-0	1-Methylnaphthalene	< 0.0042	0.0042	mg/kg	
91-57-6	2-Methylnaphthalene	< 0.0042	0.0042	mg/kg	
91-20-3	Naphthalene	< 0.0021	0.0021	mg/kg	
129-00-0	Pyrene	< 0.0042	0.0042	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	88%		22-138%
4165-60-0	Nitrobenzene-d5	92%		32-143%
1718-51-0	Terphenyl-d14	84%		48-149%

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: AST1-B01@0.5'	
Lab Sample ID: DA77508-1	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
Method: SW846-8015C SW846 3570	Percent Solids: 94.4
Project: ENSOCOWR: Dutch Lake 22-34H	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH083304.D	1	11/26/25 11:16	JB	11/25/25 08:00	OP29386	GFH24047
Run #2							

	Initial Weight	Final Volume
Run #1	5.0 g	10.0 ml
Run #2		

DRO C10-C28, ORO > C28-C36

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	101%		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: AST1-B01@0.5'	
Lab Sample ID: DA77508-1A	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
	Percent Solids: 94.4
Project: ENSOCOWR: Dutch Lake 22-34H	

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	42.4	6.0	mg/l	1	11/24/25	12/10/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium	7.35	3.0	mg/l	1	11/24/25	12/10/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium	8.85	6.0	mg/l	1	11/24/25	12/10/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: MA19948

(2) Prep QC Batch: MP44639

RL = Reporting Limit

Report of Analysis

Client Sample ID: AST1-B01@0.5'	
Lab Sample ID: DA77508-1A	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
	Percent Solids: 94.4
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.330		ratio	1	12/10/25 22:01	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: AST1-B01@0.5'	
Lab Sample ID: DA77508-1B	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
	Percent Solids: 94.4
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	11/24/25	12/05/25 CDL	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19930

(2) Prep QC Batch: MP44645

RL = Reporting Limit

Report of Analysis

Client Sample ID: AST1-B01@0.5'	Date Sampled: 11/21/25
Lab Sample ID: DA77508-1C	Date Received: 11/21/25
Matrix: SO - Soil	Percent Solids: 94.4
Project: ENSOCOWR: Dutch Lake 22-34H	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	3.7	0.18	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Barium	78.3	1.8	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Cadmium	0.13	0.091	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Copper	8.9	1.8	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Lead	5.2	0.45	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Nickel	4.0	1.8	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Selenium	< 0.18	0.18	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Silver	< 0.091	0.091	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Zinc	16.3	9.1	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA19912

(2) Prep QC Batch: MP44633

RL = Reporting Limit

Report of Analysis

Client Sample ID: AST1-B01@0.5'	Date Sampled: 11/21/25
Lab Sample ID: DA77508-1C	Date Received: 11/21/25
Matrix: SO - Soil	Percent Solids: 94.4
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
pH-saturated paste method pH ^a	8.04		su	1	11/24/25 09:25	SN	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9 Specific Conductivity ^a	0.31	0.0010	mmhos/cm	1	11/24/25 10:49	SN	SM 2510B-2011 MOD
Chromium, Hexavalent ^b	< 0.43	0.43	mg/kg	1	12/19/25 01:06	AFL	SW846 7199

(a) Saturated paste was generated on 11/24/25.

(b) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

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Client Sample ID: AST2-B01@0.5'	
Lab Sample ID: DA77508-2	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
Method: SW846 8260D	Percent Solids: 94.0
Project: ENSOCOWR: Dutch Lake 22-34H	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4V41816.D	1	12/02/25 11:59	MB	n/a	n/a	V4V2031
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.26 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	< 0.0020	0.0020	mg/kg	
108-88-3	Toluene	< 0.0020	0.0020	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	< 0.0020	0.0020	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	< 0.0020	0.0020	mg/kg	
	m,p-Xylene	< 0.0020	0.0020	mg/kg	
95-47-6	o-Xylene	< 0.0020	0.0020	mg/kg	
1330-20-7	Xylene (total)	< 0.0020	0.0020	mg/kg	
	TPH-GRO (C6-C10)	< 0.20	0.20	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%
2037-26-5	Toluene-D8	93%		70-130%
460-00-4	4-Bromofluorobenzene	103%		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: AST2-B01@0.5'		
Lab Sample ID: DA77508-2		Date Sampled: 11/21/25
Matrix: SO - Soil		Date Received: 11/21/25
Method: SW846 8270E SW846 3570		Percent Solids: 94.0
Project: ENSOCOWR: Dutch Lake 22-34H		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	7G006689.D	10	11/27/25 10:35	ZL	11/26/25 14:00	OP29389	E7G251
Run #2							

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

COGCC Table 915-1 PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	< 0.042	0.042	mg/kg	
120-12-7	Anthracene	< 0.042	0.042	mg/kg	
56-55-3	Benzo(a)anthracene	< 0.052	0.052	mg/kg	
205-99-2	Benzo(b)fluoranthene	< 0.042	0.042	mg/kg	
207-08-9	Benzo(k)fluoranthene	< 0.042	0.042	mg/kg	
50-32-8	Benzo(a)pyrene	< 0.042	0.042	mg/kg	
218-01-9	Chrysene	< 0.042	0.042	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	< 0.042	0.042	mg/kg	
206-44-0	Fluoranthene	< 0.042	0.042	mg/kg	
86-73-7	Fluorene	< 0.042	0.042	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.042	0.042	mg/kg	
90-12-0	1-Methylnaphthalene	< 0.042	0.042	mg/kg	
91-57-6	2-Methylnaphthalene	< 0.042	0.042	mg/kg	
91-20-3	Naphthalene	< 0.021	0.021	mg/kg	
129-00-0	Pyrene	< 0.042	0.042	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	130%		22-138%
4165-60-0	Nitrobenzene-d5	138%		32-143%
1718-51-0	Terphenyl-d14	236% ^b		48-149%

(a) Dilution due to extract color and heavy sample matrix interference.

(b) Outside control limits due to dilution.

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

3.5
3

Client Sample ID: AST2-B01@0.5'	
Lab Sample ID: DA77508-2	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
Method: SW846-8015C SW846 3570	Percent Solids: 94.0
Project: ENSOCOWR: Dutch Lake 22-34H	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH083305.D	1	11/26/25 11:27	JB	11/25/25 08:00	OP29386	GFH24047
Run #2							

	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)	278	4.2	mg/kg	
	TPH-ORO (> C28-C36)	412	6.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	106%		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: AST2-B01@0.5'	
Lab Sample ID: DA77508-2A	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
	Percent Solids: 94.0
Project: ENSOCOWR: Dutch Lake 22-34H	

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	130	6.0	mg/l	1	11/24/25	12/10/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium	19.7	3.0	mg/l	1	11/24/25	12/10/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium	15.2	6.0	mg/l	1	11/24/25	12/10/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: MA19948

(2) Prep QC Batch: MP44639

RL = Reporting Limit

Report of Analysis

Client Sample ID: AST2-B01@0.5'		Date Sampled: 11/21/25
Lab Sample ID: DA77508-2A		Date Received: 11/21/25
Matrix: SO - Soil		Percent Solids: 94.0
Project: ENSOCOWR: Dutch Lake 22-34H		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.328		ratio	1	12/10/25 22:02	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: AST2-B01@0.5'	
Lab Sample ID: DA77508-2B	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
	Percent Solids: 94.0
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	11/24/25	12/05/25 CDL	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19930

(2) Prep QC Batch: MP44645

RL = Reporting Limit

Report of Analysis

Client Sample ID: AST2-B01@0.5'	Date Sampled: 11/21/25
Lab Sample ID: DA77508-2C	Date Received: 11/21/25
Matrix: SO - Soil	Percent Solids: 94.0
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	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Barium	37.2	2.1	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Cadmium	< 0.10	0.10	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Copper	5.4	2.1	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Lead	3.5	0.52	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Nickel	2.5	2.1	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Selenium	< 0.21	0.21	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Silver	< 0.10	0.10	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Zinc	11.9	10	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA19912

(2) Prep QC Batch: MP44633

RL = Reporting Limit

Report of Analysis



Client Sample ID: AST2-B01@0.5'		Date Sampled: 11/21/25
Lab Sample ID: DA77508-2C		Date Received: 11/21/25
Matrix: SO - Soil		Percent Solids: 94.0
Project: ENSOCOWR: Dutch Lake 22-34H		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
pH-saturated paste method							
pH ^a	7.82		su	1	11/24/25 09:25	SN	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity ^a	0.82	0.0010	mmhos/cm	1	11/24/25 10:49	SN	SM 2510B-2011 MOD
Chromium, Hexavalent ^b	< 0.41	0.41	mg/kg	1	12/19/25 01:28	AFL	SW846 7199

(a) Saturated paste was generated on 11/24/25.

(b) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID: AST3-B01@0.5'	
Lab Sample ID: DA77508-3	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
Method: SW846 8260D	Percent Solids: 93.5
Project: ENSOCOWR: Dutch Lake 22-34H	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4V41817.D	1	12/02/25 12:21	MB	n/a	n/a	V4V2031
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.11 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	0.0027	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	113%		70-130%
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	99%		70-130%
17060-07-0	1,2-Dichloroethane-D4	105%		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: AST3-B01@0.5'	
Lab Sample ID: DA77508-3	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
Method: SW846 8270E SW846 3570	Percent Solids: 93.5
Project: ENSOCOWR: Dutch Lake 22-34H	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G006674.D	1	11/27/25 05:34	ZL	11/26/25 14:00	OP29389	E7G251
Run #2							

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

COGCC Table 915-1 PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	< 0.0040	0.0040	mg/kg	
120-12-7	Anthracene	< 0.0040	0.0040	mg/kg	
56-55-3	Benzo(a)anthracene	< 0.0050	0.0050	mg/kg	
205-99-2	Benzo(b)fluoranthene	< 0.0040	0.0040	mg/kg	
207-08-9	Benzo(k)fluoranthene	< 0.0040	0.0040	mg/kg	
50-32-8	Benzo(a)pyrene	< 0.0040	0.0040	mg/kg	
218-01-9	Chrysene	< 0.0040	0.0040	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	< 0.0040	0.0040	mg/kg	
206-44-0	Fluoranthene	< 0.0040	0.0040	mg/kg	
86-73-7	Fluorene	< 0.0040	0.0040	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.0040	0.0040	mg/kg	
90-12-0	1-Methylnaphthalene	< 0.0040	0.0040	mg/kg	
91-57-6	2-Methylnaphthalene	< 0.0040	0.0040	mg/kg	
91-20-3	Naphthalene	< 0.0020	0.0020	mg/kg	
129-00-0	Pyrene	< 0.0040	0.0040	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	90%		22-138%
4165-60-0	Nitrobenzene-d5	99%		32-143%
1718-51-0	Terphenyl-d14	85%		48-149%

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

3.9
3

Client Sample ID: AST3-B01@0.5'	
Lab Sample ID: DA77508-3	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
Method: SW846-8015C SW846 3570	Percent Solids: 93.5
Project: ENSOCOWR: Dutch Lake 22-34H	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH083306.D	1	11/26/25 11:39	JB	11/25/25 08:00	OP29386	GFH24047
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.0 g	10.0 ml
Run #2		

DRO C10-C28, ORO > C28-C36

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	< 4.3	4.3	mg/kg	
	TPH-ORO (> C28-C36)	< 6.4	6.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	104%		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: AST3-B01@0.5'	
Lab Sample ID: DA77508-3A	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
	Percent Solids: 93.5
Project: ENSOCOWR: Dutch Lake 22-34H	

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	90.5	6.0	mg/l	1	11/24/25	12/10/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium	13.4	3.0	mg/l	1	11/24/25	12/10/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium	11.7	6.0	mg/l	1	11/24/25	12/10/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: MA19948

(2) Prep QC Batch: MP44639

RL = Reporting Limit

Report of Analysis

Client Sample ID: AST3-B01@0.5'		Date Sampled: 11/21/25
Lab Sample ID: DA77508-3A		Date Received: 11/21/25
Matrix: SO - Soil		Percent Solids: 93.5
Project: ENSOCOWR: Dutch Lake 22-34H		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.303		ratio	1	12/10/25 22:04	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: AST3-B01@0.5'	Date Sampled: 11/21/25
Lab Sample ID: DA77508-3B	Date Received: 11/21/25
Matrix: SO - Soil	Percent Solids: 93.5
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	11/24/25	12/05/25 CDL	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19930

(2) Prep QC Batch: MP44645

RL = Reporting Limit

Report of Analysis

Client Sample ID: AST3-B01@0.5'		Date Sampled: 11/21/25
Lab Sample ID: DA77508-3C		Date Received: 11/21/25
Matrix: SO - Soil		Percent Solids: 93.5
Project: ENSOCOWR: Dutch Lake 22-34H		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	2.9	0.19	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Barium	39.7	1.9	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Cadmium	< 0.097	0.097	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Copper	5.8	1.9	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Lead	4.2	0.49	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Nickel	2.7	1.9	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Selenium	< 0.19	0.19	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Silver	< 0.097	0.097	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Zinc	13.7	9.7	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA19912

(2) Prep QC Batch: MP44633

RL = Reporting Limit

Report of Analysis

Client Sample ID: AST3-B01@0.5'		Date Sampled: 11/21/25
Lab Sample ID: DA77508-3C		Date Received: 11/21/25
Matrix: SO - Soil		Percent Solids: 93.5
Project: ENSOCOWR: Dutch Lake 22-34H		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
pH-saturated paste method							
pH ^a	7.90		su	1	11/24/25 09:25	SN	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity ^a	0.63	0.0010	mmhos/cm	1	11/24/25 10:49	SN	SM 2510B-2011 MOD
Chromium, Hexavalent ^b	< 0.44	0.44	mg/kg	1	12/19/25 01:50	AFL	SW846 7199

(a) Saturated paste was generated on 11/24/25.

(b) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID: AST4-B01@0.5'	
Lab Sample ID: DA77508-4	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
Method: SW846 8260D	Percent Solids: 94.5
Project: ENSOCOWR: Dutch Lake 22-34H	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4V41818.D	1	12/02/25 12:43	MB	n/a	n/a	V4V2031
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	< 0.0010	0.0010	mg/kg	
100-41-4	Ethylbenzene	< 0.0020	0.0020	mg/kg	
108-88-3	Toluene	< 0.0020	0.0020	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	< 0.0020	0.0020	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	< 0.0020	0.0020	mg/kg	
	m,p-Xylene	< 0.0020	0.0020	mg/kg	
95-47-6	o-Xylene	< 0.0020	0.0020	mg/kg	
1330-20-7	Xylene (total)	< 0.0020	0.0020	mg/kg	
	TPH-GRO (C6-C10)	< 0.20	0.20	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		70-130%
2037-26-5	Toluene-D8	93%		70-130%
460-00-4	4-Bromofluorobenzene	90%		70-130%
17060-07-0	1,2-Dichloroethane-D4	104%		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: AST4-B01@0.5'		
Lab Sample ID: DA77508-4		Date Sampled: 11/21/25
Matrix: SO - Soil		Date Received: 11/21/25
Method: SW846 8270E SW846 3570		Percent Solids: 94.5
Project: ENSOCOWR: Dutch Lake 22-34H		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G006675.D	1	11/27/25 05:54	ZL	11/26/25 14:00	OP29389	E7G251
Run #2							

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

COGCC Table 915-1 PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	< 0.0040	0.0040	mg/kg	
120-12-7	Anthracene	< 0.0040	0.0040	mg/kg	
56-55-3	Benzo(a)anthracene	< 0.0050	0.0050	mg/kg	
205-99-2	Benzo(b)fluoranthene	< 0.0040	0.0040	mg/kg	
207-08-9	Benzo(k)fluoranthene	< 0.0040	0.0040	mg/kg	
50-32-8	Benzo(a)pyrene	< 0.0040	0.0040	mg/kg	
218-01-9	Chrysene	< 0.0040	0.0040	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	< 0.0040	0.0040	mg/kg	
206-44-0	Fluoranthene	< 0.0040	0.0040	mg/kg	
86-73-7	Fluorene	< 0.0040	0.0040	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.0040	0.0040	mg/kg	
90-12-0	1-Methylnaphthalene	< 0.0040	0.0040	mg/kg	
91-57-6	2-Methylnaphthalene	< 0.0040	0.0040	mg/kg	
91-20-3	Naphthalene	< 0.0020	0.0020	mg/kg	
129-00-0	Pyrene	< 0.0040	0.0040	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	108%		22-138%
4165-60-0	Nitrobenzene-d5	115%		32-143%
1718-51-0	Terphenyl-d14	103%		48-149%

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: AST4-B01@0.5'	
Lab Sample ID: DA77508-4	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
Method: SW846-8015C SW846 3570	Percent Solids: 94.5
Project: ENSOCOWR: Dutch Lake 22-34H	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH083341.D	1	11/26/25 19:41	JB	11/25/25 08:00	OP29387	GFH24048
Run #2							

	Initial Weight	Final Volume
Run #1	5.0 g	10.0 ml
Run #2		

DRO C10-C28, ORO > C28-C36

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	101%		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: AST4-B01@0.5'	
Lab Sample ID: DA77508-4A	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
	Percent Solids: 94.5
Project: ENSOCOWR: Dutch Lake 22-34H	

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	49.7	6.0	mg/l	1	11/24/25	12/10/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²
Magnesium	6.51	3.0	mg/l	1	11/24/25	12/10/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²
Sodium	7.80	6.0	mg/l	1	11/24/25	12/10/25 BR	SW846 6010C ¹	USDA HANDBOOK 60 ²

(1) Instrument QC Batch: MA19948

(2) Prep QC Batch: MP44639

RL = Reporting Limit

Report of Analysis

Client Sample ID: AST4-B01@0.5'	Date Sampled: 11/21/25
Lab Sample ID: DA77508-4A	Date Received: 11/21/25
Matrix: SO - Soil	Percent Solids: 94.5
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.276		ratio	1	12/10/25 22:05	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: AST4-B01@0.5'	
Lab Sample ID: DA77508-4B	Date Sampled: 11/21/25
Matrix: SO - Soil	Date Received: 11/21/25
	Percent Solids: 94.5
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	11/24/25	12/05/25 CDL	SW846 6010C ¹	HWS-B ²

(1) Instrument QC Batch: MA19930

(2) Prep QC Batch: MP44645

RL = Reporting Limit

Report of Analysis

Client Sample ID: AST4-B01@0.5'	Date Sampled: 11/21/25
Lab Sample ID: DA77508-4C	Date Received: 11/21/25
Matrix: SO - Soil	Percent Solids: 94.5
Project: ENSOCOWR: Dutch Lake 22-34H	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	5.5	0.19	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Barium	53.0	1.9	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Cadmium	< 0.094	0.094	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Copper	6.8	1.9	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Lead	5.2	0.47	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Nickel	3.1	1.9	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Selenium	< 0.19	0.19	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Silver	< 0.094	0.094	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²
Zinc	14.6	9.4	mg/kg	10	11/24/25	12/05/25 GS	SW846 6020B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA19912

(2) Prep QC Batch: MP44633

RL = Reporting Limit

Report of Analysis

Client Sample ID: AST4-B01@0.5'	Date Sampled: 11/21/25
Lab Sample ID: DA77508-4C	Date Received: 11/21/25
Matrix: SO - Soil	Percent Solids: 94.5
Project: ENSOCOWR: Dutch Lake 22-34H	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
pH-saturated paste method pH ^a	7.91		su	1	11/24/25 09:25	SN	WREP-125,4E-SATPASTE
prep: DEPT.OF AG, BOOK N9 Specific Conductivity ^a	0.33	0.0010	mmhos/cm	1	11/24/25 10:49	SN	SM 2510B-2011 MOD
Chromium, Hexavalent ^b	< 0.43	0.43	mg/kg	1	12/19/25 02:13	AFL	SW846 7199

(a) Saturated paste was generated on 11/24/25.

(b) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS Sample Receipt Summary

Job Number: da77508

Client: ENSOLUM

Project: DUTCH LAKE 22-34H

Date / Time Received: 11/21/2025 6:30:00 PM

Delivery Method: CO

Airbill #'s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (4.0);

Cooler Temps (Corrected) °C: Cooler 1: (4.0);

Cooler Informatio

Y or N

- 1. Custody Seals Present:
- 2. Custody Seals Intact:
- 3. Temp criteria achieved:
- 4. Cooler temp verification: IR Gun
- 5. Cooler media: Ice (Bag)

Trip Blank Information

Y or N N/A

- 1. Trip Blank present / cooler:
- 2. Trip Blank listed on COC:

W or S N/A

- 3. Type of TB Received:

Sample Information

Y or N N/A

- 1. Sample labels present on bottles:
- 2. Samples presented properly:
- 3. Sufficient volume/containers recv'd for analysis:
- 4. Condition of sample: Intact
- 5. Sample recv'd within HT:
- 6. Dates/Times/IDs on COC match sample label:
- 7. VOCs have headspace:
- 8. Bottles received for unspecified tests:
- 9. Compositing instructions clear:
- 10. Voa Soil Kits/Jars received past 48hrs?
- 11. % Solids Jar Received?

Misc Information

Number of Encores: 25 Gram 5 Gram Number of Lab Filtered Metals
 Test Strip Lot #: pH 0-3: _____ pH 10-12: _____ Other: (Specify) _____
 Residual Chlorine Test Strip Lot: _____

Comments 8260 samples will be in freezer by 7 PM.

SM001

Rev. Date 05/04/17

Technician: MICHELLD

Date: 11/21/2025 5:30:37 PM

Reviewer: _____

Date: _____

DA77508: Chain of Custody

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4.1
4

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: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4V2031-MB	4V41795.D	1	12/02/25	MB	n/a	n/a	V4V2031

The QC reported here applies to the following samples:

Method: SW846 8260D

DA77508-1, DA77508-2, DA77508-3, DA77508-4

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	1.3	2.0	ug/kg	J
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	3.4	2.0	ug/kg	
95-47-6	o-Xylene	ND	2.0	ug/kg	
1330-20-7	Xylene (total)	3.4	2.0	ug/kg	
	TPH-GRO (C6-C10)	ND	200	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	97%	70-130%
2037-26-5	Toluene-D8	92%	70-130%
460-00-4	4-Bromofluorobenzene	92%	70-130%
17060-07-0	1,2-Dichloroethane-D4	100%	70-130%

Blank Spike Summary

Job Number: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4V2031-BS	4V41791A.D	1	12/02/25	MB	n/a	n/a	V4V2031

The QC reported here applies to the following samples:

Method: SW846 8260D

DA77508-1, DA77508-2, DA77508-3, DA77508-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	52.8	106	70-130
100-41-4	Ethylbenzene	50	52.7	105	70-130
108-88-3	Toluene	50	53.7	107	70-130
95-63-6	1,2,4-Trimethylbenzene	50	52.9	106	70-134
108-67-8	1,3,5-Trimethylbenzene	50	52.0	104	70-134
	m,p-Xylene	100	115	115	70-130
95-47-6	o-Xylene	50	56.8	114	70-136
1330-20-7	Xylene (total)	150	172	115	70-131

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	70-130%
2037-26-5	Toluene-D8	97%	70-130%
460-00-4	4-Bromofluorobenzene	104%	70-130%
17060-07-0	1,2-Dichloroethane-D4	102%	70-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4V2031-BS	4V41794.D	1	12/02/25	MB	n/a	n/a	V4V2031

The QC reported here applies to the following samples:

Method: SW846 8260D

DA77508-1, DA77508-2, DA77508-3, DA77508-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
	TPH-GRO (C6-C10)	2000	1960	98	64-144

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	70-130%
2037-26-5	Toluene-D8	95%	70-130%
460-00-4	4-Bromofluorobenzene	90%	70-130%
17060-07-0	1,2-Dichloroethane-D4	97%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA77498-1MS	4V41798.D	1	12/02/25	MB	n/a	n/a	V4V2031
DA77498-1MSD	4V41799.D	1	12/02/25	MB	n/a	n/a	V4V2031
DA77498-1	4V41796.D	1	12/02/25	MB	n/a	n/a	V4V2031

The QC reported here applies to the following samples:

Method: SW846 8260D

DA77508-1, DA77508-2, DA77508-3, DA77508-4

CAS No.	Compound	DA77498-1 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	52.6	47.4	90	52.6	43.4	83	9	44-150/44
100-41-4	Ethylbenzene	< 2.1	52.6	47.6	91	52.6	42.4	81	12	41-149/49
108-88-3	Toluene	< 2.1	52.6	45.0	83	52.6	39.0	72	14	40-149/47
95-63-6	1,2,4-Trimethylbenzene	< 2.1	52.6	48.2	92	52.6	44.5	85	8	26-164/57
108-67-8	1,3,5-Trimethylbenzene	< 2.1	52.6	48.2	92	52.6	44.8	85	7	30-161/60
	m,p-Xylene	< 3.5	105	99.1	91	105	87.1	80	13	36-152/49
95-47-6	o-Xylene	< 2.1	52.6	51.2	97	52.6	48.1	91	6	33-168/49
1330-20-7	Xylene (total)	< 3.5	158	150	93	158	135	84	11	36-157/49

CAS No.	Surrogate Recoveries	MS	MSD	DA77498-1	Limits
1868-53-7	Dibromofluoromethane	102%	112%	105%	70-130%
2037-26-5	Toluene-D8	94%	93%	94%	70-130%
460-00-4	4-Bromofluorobenzene	102%	95%	90%	70-130%
17060-07-0	1,2-Dichloroethane-D4	104%	108%	105%	70-130%

* = Outside of Control Limits.

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA77500-6MS	4V41800.D	1	12/02/25	MB	n/a	n/a	V4V2031
DA77500-6MSD	4V41801.D	1	12/02/25	MB	n/a	n/a	V4V2031
DA77500-6	4V41797.D	1	12/02/25	MB	n/a	n/a	V4V2031

The QC reported here applies to the following samples:

Method: SW846 8260D

DA77508-1, DA77508-2, DA77508-3, DA77508-4

CAS No.	Compound	DA77500-6 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	2250	1860	83	2250	1870	83	1	18-158/83

CAS No.	Surrogate Recoveries	MS	MSD	DA77500-6	Limits
1868-53-7	Dibromofluoromethane	109%	101%	97%	70-130%
2037-26-5	Toluene-D8	93%	92%	93%	70-130%
460-00-4	4-Bromofluorobenzene	91%	94%	94%	70-130%
17060-07-0	1,2-Dichloroethane-D4	100%	98%	97%	70-130%

* = Outside of Control Limits.

5.3.2
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: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29389-MB	7G006666.D	1	11/27/25	ZL	11/26/25	OP29389	E7G251

The QC reported here applies to the following samples:

Method: SW846 8270E

DA77508-1, DA77508-2, DA77508-3, DA77508-4

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	103%	22-138%
4165-60-0	Nitrobenzene-d5	108%	32-143%
1718-51-0	Terphenyl-d14	107%	48-149%

Blank Spike Summary

Job Number: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29389-BS	7G006667.D	1	11/27/25	ZL	11/26/25	OP29389	E7G251

The QC reported here applies to the following samples:

Method: SW846 8270E

DA77508-1, DA77508-2, DA77508-3, DA77508-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	200	247	124	46-152
120-12-7	Anthracene	200	275	138	65-147
56-55-3	Benzo(a)anthracene	200	262	131	64-144
205-99-2	Benzo(b)fluoranthene	200	276	138	70-154
207-08-9	Benzo(k)fluoranthene	200	257	129	70-158
50-32-8	Benzo(a)pyrene	200	267	134	64-159
218-01-9	Chrysene	200	271	136	70-156
53-70-3	Dibenzo(a,h)anthracene	200	264	132	63-156
206-44-0	Fluoranthene	200	281	141	62-155
86-73-7	Fluorene	200	249	125	55-151
193-39-5	Indeno(1,2,3-cd)pyrene	200	264	132	67-156
90-12-0	1-Methylnaphthalene	200	224	112	21-168
91-57-6	2-Methylnaphthalene	200	225	113	18-161
91-20-3	Naphthalene	200	225	113	2-173
129-00-0	Pyrene	200	272	136	61-158

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	103%	22-138%
4165-60-0	Nitrobenzene-d5	106%	32-143%
1718-51-0	Terphenyl-d14	97%	48-149%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29389-MS	7G006668.D	1	11/27/25	ZL	11/26/25	OP29389	E7G251
OP29389-MSD	7G006669.D	1	11/27/25	ZL	11/26/25	OP29389	E7G251
DA77503-1	7G006670.D	1	11/27/25	ZL	11/26/25	OP29389	E7G251

The QC reported here applies to the following samples:

Method: SW846 8270E

DA77508-1, DA77508-2, DA77508-3, DA77508-4

CAS No.	Compound	DA77503-1 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	< 4.4	216	268	124	212	247	116	8	30-148/32
120-12-7	Anthracene	< 4.4	216	288	133	212	280	132	3	40-148/33
56-55-3	Benzo(a)anthracene	< 5.5	216	278	129	212	273	129	2	44-144/32
205-99-2	Benzo(b)fluoranthene	< 4.4	216	292	135	212	281	132	4	36-166/43
207-08-9	Benzo(k)fluoranthene	< 4.4	216	265	123	212	258	122	3	43-165/41
50-32-8	Benzo(a)pyrene	< 4.4	216	276	128	212	269	127	3	41-161/37
218-01-9	Chrysene	< 4.4	216	277	128	212	279	131	1	52-152/32
53-70-3	Dibenzo(a,h)anthracene	< 4.4	216	277	128	212	262	123	6	42-155/36
206-44-0	Fluoranthene	< 4.4	216	296	137	212	290	137	2	40-151/34
86-73-7	Fluorene	< 4.4	216	267	123	212	260	123	3	34-149/34
193-39-5	Indeno(1,2,3-cd)pyrene	< 4.4	216	274	127	212	264	124	4	41-156/37
90-12-0	1-Methylnaphthalene	< 4.4	216	246	114	212	215	101	13	23-149/36
91-57-6	2-Methylnaphthalene	< 4.4	216	250	116	212	216	102	15	18-144/35
91-20-3	Naphthalene	< 2.2	216	251	116	212	208	98	19	18-150/32
129-00-0	Pyrene	< 4.4	216	282	130	212	281	132	0	38-156/33

CAS No.	Surrogate Recoveries	MS	MSD	DA77503-1	Limits
321-60-8	2-Fluorobiphenyl	103%	111%	109%	22-138%
4165-60-0	Nitrobenzene-d5	106%	114%	112%	32-143%
1718-51-0	Terphenyl-d14	94%	102%	106%	48-149%

* = 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: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29386-MB	FH083278.D	1	11/26/25	JB	11/25/25	OP29386	GFH24047

The QC reported here applies to the following samples:

Method: SW846-8015C

DA77508-1, DA77508-2, DA77508-3

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%

7.1.1
7

Method Blank Summary

Job Number: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29387-MB	FH083334.D	1	11/26/25	JB	11/25/25	OP29387	GFH24048

The QC reported here applies to the following samples:

Method: SW846-8015C

DA77508-4

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	92% 20-142%

7.1.2
7

Blank Spike Summary

Job Number: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29386-BS1	FH083279.D	1	11/26/25	JB	11/25/25	OP29386	GFH24047

The QC reported here applies to the following samples:

Method: SW846-8015C

DA77508-1, DA77508-2, DA77508-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	200	190	95	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	104%	20-142%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29386-BS2	FH083280.D	1	11/26/25	JB	11/25/25	OP29386	GFH24047

The QC reported here applies to the following samples:

Method: SW846-8015C

DA77508-1, DA77508-2, DA77508-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-ORO (> C28-C36)	200	212	106	70-138

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	101%	20-142%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29387-BS1	FH083335.D	1	11/26/25	JB	11/25/25	OP29387	GFH24048

The QC reported here applies to the following samples:

Method: SW846-8015C

DA77508-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	200	189	95	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	102%	20-142%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29387-BS2	FH083336.D	1	11/26/25	JB	11/25/25	OP29387	GFH24048

The QC reported here applies to the following samples:

Method: SW846-8015C

DA77508-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-ORO (> C28-C36)	200	221	111	70-138

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	98%	20-142%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29386-MS1	FH083281.D	1	11/26/25	JB	11/25/25	OP29386	GFH24047
OP29386-MSD1	FH083282.D	1	11/26/25	JB	11/25/25	OP29386	GFH24047
DA77497-2	FH083285.D	1	11/26/25	JB	11/25/25	OP29386	GFH24047

The QC reported here applies to the following samples:

Method: SW846-8015C

DA77508-1, DA77508-2, DA77508-3

CAS No.	Compound	DA77497-2 mg/kg	Spike Q	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	< 4.8	240	240	100	235	228	97	5	59-130/30

CAS No.	Surrogate Recoveries	MS	MSD	DA77497-2	Limits
84-15-1	o-Terphenyl	106%	107%	99%	20-142%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29386-MS2	FH083283.D	1	11/26/25	JB	11/25/25	OP29386	GFH24047
OP29386-MSD2	FH083284.D	1	11/26/25	JB	11/25/25	OP29386	GFH24047
DA77497-3	FH083286.D	1	11/26/25	JB	11/25/25	OP29386	GFH24047

The QC reported here applies to the following samples:

Method: SW846-8015C

DA77508-1, DA77508-2, DA77508-3

CAS No.	Compound	DA77497-3 mg/kg	Spike Q	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-ORO (> C28-C36)	30.2	235	271	102	246	305	112	12	70-153/30

CAS No.	Surrogate Recoveries	MS	MSD	DA77497-3	Limits
84-15-1	o-Terphenyl	102%	110%	108%	20-142%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29387-MS1	FH083337.D	1	11/26/25	JB	11/25/25	OP29387	GFH24048
OP29387-MSD1	FH083338.D	1	11/26/25	JB	11/25/25	OP29387	GFH24048
DA77508-4	FH083341.D	1	11/26/25	JB	11/25/25	OP29387	GFH24048

The QC reported here applies to the following samples:

Method: SW846-8015C

DA77508-4

CAS No.	Compound	DA77508-4 mg/kg	Spike Q	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	< 4.2	210	311	148* a	211	198	94	44* b	59-130/30

CAS No.	Surrogate Recoveries	MS	MSD	DA77508-4	Limits
84-15-1	o-Terphenyl	106%	100%	101%	20-142%

(a) Outside control limits biased high. BS within acceptable recovery criteria.

(b) High RPD. BS within acceptable recovery criteria.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA77508
Account: CIVITCOW Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29387-MS2	FH083339.D	1	11/26/25	JB	11/25/25	OP29387	GFH24048
OP29387-MSD2	FH083340.D	1	11/26/25	JB	11/25/25	OP29387	GFH24048
DA77512-9	FH083342.D	1	11/26/25	JB	11/25/25	OP29387	GFH24048

The QC reported here applies to the following samples:

Method: SW846-8015C

DA77508-4

CAS No.	Compound	DA77512-9 mg/kg	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-ORO (> C28-C36)	45.5	247	310	107	252	330	113	6	70-153/30

CAS No.	Surrogate Recoveries	MS	MSD	DA77512-9	Limits
84-15-1	o-Terphenyl	100%	106%	96%	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: DA77508
Account: CIVITCOW - Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44633
Matrix Type: SOLID

Methods: SW846 6020B
Units: mg/kg

Prep Date: 11/24/25

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.52	5		
Antimony	0.40	.01	.05		
Arsenic	0.20	.05	.05	0.021	<0.20
Barium	2.0	.096	.24	0.059	<2.0
Beryllium	0.20	.077	.04		
Boron	40	18	10		
Cadmium	0.10	.03	.04	-0.0046	<0.10
Calcium	400	25	30		
Chromium	2.0	.087	.6		
Cobalt	0.20	.04	.025		
Copper	2.0	.05	.25	1.6	* (a)
Iron	20	1.6	15		
Lead	0.50	.094	.2	0.0091	<0.50
Magnesium	100	10	10		
Manganese	1.0	.079	.2		
Molybdenum	1.0	.037	.27		
Nickel	2.0	.098	.2	-0.40	<2.0
Phosphorus	60	7.6	25		
Potassium	200	2	25		
Selenium	0.20	.05	.05	-0.013	<0.20
Silver	0.10	.0081	.03	-0.00047	<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	0.62	<10

Associated samples MP44633: DA77508-1C, DA77508-2C, DA77508-3C, DA77508-4C

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 ND or 10x the result of the MB.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA77508
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44633
 Matrix Type: SOLID

Methods: SW846 6020B
 Units: mg/kg

Prep Date: 11/24/25

Metal	DA77507-1C Original MS		SpikeLot ICPMS6	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	0.99	88.6	97.1	90.2	75-125
Barium	19.1	202	194	94.1	75-125
Beryllium					
Boron					
Cadmium	0.0	47.8	48.6	98.4	75-125
Calcium					
Chromium					
Cobalt					
Copper	4.3	52.5	48.6	99.2	75-125
Iron					
Lead	2.8	101	97.1	101.1	75-125
Magnesium					
Manganese					
Molybdenum					
Nickel	1.5	48.4	48.6	96.6	75-125
Phosphorus					
Potassium					
Selenium	0.077	87.3	97.1	89.8	75-125
Silver	0.012	19.2	19.4	98.8	75-125
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	9.1	55.7	48.6	95.9	75-125

Associated samples MP44633: DA77508-1C, DA77508-2C, DA77508-3C, DA77508-4C

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

8.12
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA77508
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44633
 Matrix Type: SOLID

Methods: SW846 6020B
 Units: mg/kg

Prep Date: 11/24/25

Metal	DA77507-1C Original MSD		SpikeLot ICPMS6	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	0.99	79.2	92	85.0	11.2	20
Barium	19.1	182	184	88.5	10.4	20
Beryllium						
Boron						
Cadmium	0.0	42.0	46	91.3	12.9	20
Calcium						
Chromium						
Cobalt						
Copper	4.3	46.8	46	92.4	11.5	20
Iron						
Lead	2.8	89.8	92	94.6	11.7	20
Magnesium						
Manganese						
Molybdenum						
Nickel	1.5	43.0	46	90.2	11.8	20
Phosphorus						
Potassium						
Selenium	0.077	77.8	92	84.5	11.5	20
Silver	0.012	16.8	18.4	91.2	13.3	20
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	9.1	50.2	46	89.4	10.4	20

Associated samples MP44633: DA77508-1C, DA77508-2C, DA77508-3C, DA77508-4C

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

8.12
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA77508
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44633
 Matrix Type: SOLID

Methods: SW846 6020B
 Units: mg/kg

Prep Date: 11/24/25

Metal	BSP Result	Spikelot ICPMS6	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	89.7	100	89.7	80-120
Barium	181	200	90.5	80-120
Beryllium				
Boron				
Cadmium	47.9	50	95.8	80-120
Calcium				
Chromium				
Cobalt				
Copper	50.3	50	100.6	80-120
Iron				
Lead	98.8	100	98.8	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel	47.3	50	94.6	80-120
Phosphorus				
Potassium				
Selenium	89.8	100	89.8	80-120
Silver	19.4	20	97.0	80-120
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	47.1	50	94.2	80-120

Associated samples MP44633: DA77508-1C, DA77508-2C, DA77508-3C, DA77508-4C

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: DA77508
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44633
 Matrix Type: SOLID

Methods: SW846 6020B
 Units: ug/l

Prep Date: 11/24/25

Metal	DA77507-1C Original SDL 10:50%DIF		QC Limits	
Aluminum				
Antimony				
Arsenic	10.7	0.00	100.0 (a)	0-20
Barium	206	24.3	88.2* (b)	0-20
Beryllium				
Boron				
Cadmium	0.00	0.00	NC	0-20
Calcium				
Chromium				
Cobalt				
Copper	46.7	5.32	88.6* (b)	0-20
Iron				
Lead	29.7	0.00	100.0 (a)	0-20
Magnesium				
Manganese				
Molybdenum				
Nickel	16.1	0.00	100.0 (a)	0-20
Phosphorus				
Potassium				
Selenium	0.832	0.00	100.0 (a)	0-20
Silver	0.125	0.00	100.0 (a)	0-20
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	98.4	11.6	88.2* (b)	0-20

Associated samples MP44633: DA77508-1C, DA77508-2C, DA77508-3C, DA77508-4C

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).

(b) RPD acceptable due to low duplicate and sample concentrations.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: DA77508
Account: CIVITCOW - Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44639
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 11/24/25

Metal	RL	IDL	MDL	MB raw	final
Aluminum	1500	71	230		
Arsenic	380	68	69		
Barium	150	3	20		
Beryllium	150	2.3	20		
Boron	750	160	95		
Cadmium	150	5.3	20		
Calcium	6000	100	750	87.0	<6000
Chromium	150	9.4	20		
Cobalt	75	11	9.5		
Copper	150	6.9	20		
Iron	1100	41	180		
Lithium	75	7.5	20		
Magnesium	3000	330	380	105	<3000
Manganese	75	7.3	9.5		
Molybdenum	150	29	42		
Potassium	15000	380	1900		
Silver	450	14	57		
Sodium	6000	67	750	450	<6000

Associated samples MP44639: DA77508-1A, DA77508-2A, DA77508-3A, DA77508-4A

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: DA77508
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44639
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 11/24/25

Metal	DA77507-2A Original MS		SpikeLot ICPAL6	% Rec	QC Limits
Aluminum					
Arsenic					
Barium					
Beryllium					
Boron					
Cadmium					
Calcium	150000	532000	375000	101.9	75-125
Chromium					
Cobalt					
Copper					
Iron					
Lithium					
Magnesium	48400	417000	375000	98.3	75-125
Manganese					
Molybdenum					
Potassium					
Silver					
Sodium	202000	554000	375000	93.9	75-125

Associated samples MP44639: DA77508-1A, DA77508-2A, DA77508-3A, DA77508-4A

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA77508
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44639
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 11/24/25

Metal	DA77507-2A Original MSD	SpikeLot ICPAL6	% Rec	MSD RPD	QC Limit	
Aluminum						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium						
Calcium	150000	521000	375000	98.9	2.1	20
Chromium						
Cobalt						
Copper						
Iron						
Lithium						
Magnesium	48400	406000	375000	95.4	2.7	20
Manganese						
Molybdenum						
Potassium						
Silver						
Sodium	202000	539000	375000	89.9	2.7	20

Associated samples MP44639: DA77508-1A, DA77508-2A, DA77508-3A, DA77508-4A

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: DA77508
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44639
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 11/24/25

Metal	BSP Result	Spikelot ICPALL6	% Rec	QC Limits
Aluminum				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium	379000	375000	101.1	80-120
Chromium				
Cobalt				
Copper				
Iron				
Lithium				
Magnesium	367000	375000	97.9	80-120
Manganese				
Molybdenum				
Potassium				
Silver				
Sodium	354000	375000	94.4	80-120

Associated samples MP44639: DA77508-1A, DA77508-2A, DA77508-3A, DA77508-4A

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: DA77508
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44639
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 11/24/25

Metal	DA77507-2A Original SDL 1:5		%DIF	QC Limits
Aluminum				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium	10000	9780	2.4	0-10
Chromium				
Cobalt				
Copper				
Iron				
Lithium				
Magnesium	3230	3200	0.8	0-10
Manganese				
Molybdenum				
Potassium				
Silver				
Sodium	13400	12900	3.9	0-10

Associated samples MP44639: DA77508-1A, DA77508-2A, DA77508-3A, DA77508-4A

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

8.2.4
8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: DA77508
Account: CIVITCOW - Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44645
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 11/24/25

Metal	RL	IDL	MDL	MB raw	final
Aluminum	500	24	75		
Arsenic	130	23	23		
Barium	50	1	6.5		
Beryllium	50	.78	6.5		
Boron	250	52	32	-7.5	<250
Cadmium	50	1.8	6.5		
Calcium	2000	35	250		
Chromium	50	3.1	6.5		
Cobalt	25	3.7	3.2		
Copper	50	2.3	6.5		
Iron	350	14	60		
Lithium	25	2.5	6.5		
Magnesium	1000	110	130		
Manganese	25	2.4	3.2		
Molybdenum	50	9.7	14		
Potassium	5000	130	630		
Silver	150	4.5	19		
Sodium	2000	22	250		

Associated samples MP44645: DA77508-1B, DA77508-2B, DA77508-3B, DA77508-4B

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

8.3.1
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA77508
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44645
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 11/24/25 11/24/25

Metal	DA77507-1B Original	DUP	RPD	QC Limits	DA77507-1B Original MS	Spikelot ICPAL6	% Rec	QC Limits
Aluminum								
Arsenic								
Barium								
Beryllium								
Boron	61.5	61.5	0.0	0-20	61.5	10400	10000	103.4 75-125
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lithium								
Magnesium								
Manganese								
Molybdenum								
Potassium								
Silver								
Sodium								

Associated samples MP44645: DA77508-1B, DA77508-2B, DA77508-3B, DA77508-4B

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

8.3.2
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA77508
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44645
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 11/24/25

Metal	BSP Result	Spikelot ICPALL6	% Rec	QC Limits
Aluminum				
Arsenic				
Barium				
Beryllium				
Boron	9290	10000	92.9	80-120
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lithium				
Magnesium				
Manganese				
Molybdenum				
Potassium				
Silver				
Sodium				

Associated samples MP44645: DA77508-1B, DA77508-2B, DA77508-3B, DA77508-4B

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

8.3.3
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: DA77508
 Account: CIVITCOW - Civitas
 Project: ENSOCOWR: Dutch Lake 22-34H

QC Batch ID: MP44645
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 11/24/25

Metal	DA77507-1B Original SDL 1:5	%DIF	QC Limits
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Aluminum			
Arsenic			
Barium			
Beryllium			
Boron	12.3	0.00	100.0(a) 0-10
Cadmium			
Calcium			
Chromium			
Cobalt			
Copper			
Iron			
Lithium			
Magnesium			
Manganese			
Molybdenum			
Potassium			
Silver			
Sodium			

Associated samples MP44645: DA77508-1B, DA77508-2B, DA77508-3B, DA77508-4B

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).

8.3.4

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: DA77508
Account: CIVITCOW - Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Specific Conductivity	GP40106/GN70969			mmhos/cm	1.409	1.4	98.6(a)	90-110%

Associated Samples:

Batch GP40106: DA77508-1C, DA77508-2C, DA77508-3C, DA77508-4C

(*) Outside of QC limits

(a) Saturated paste was generated on 11/24/25.

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA77508
Account: CIVITCOW - Civitas
Project: ENSOCOWR: Dutch Lake 22-34H

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Specific Conductivity	GP40106/GN70969	DA77507-1C	mmhos/cm	1.0	1.0(a)	0.3(a)	0-20%
pH	GN70967	DA77507-1C	su	7.01	7.04(a)	0.4(a)	0-5%

Associated Samples:

Batch GN70967: DA77508-1C, DA77508-2C, DA77508-3C, DA77508-4C

Batch GP40106: DA77508-1C, DA77508-2C, DA77508-3C, DA77508-4C

(*) Outside of QC limits

(a) Saturated paste was generated on 11/24/25.

Misc. Forms

Custody Documents and Other Forms

(SGS Orlando, FL)

Includes the following where applicable:

- Chain of Custody

General Chemistry

QC Data Summaries

(SGS Orlando, FL)

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: DA77508
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	GP42383/GN2444	0.41	0.0	mg/kg	10	10.4	104.0	80-120%
Chromium, Hexavalent	GP42383/GN2444			mg/kg	684	733	107.1	80-120%

Associated Samples:

Batch GP42383: DA77508-1C, DA77508-2C, DA77508-3C, DA77508-4C

(*) Outside of QC limits

11.1
11

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA77508
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	GP42383/GN2444	DA77507-6	mg/kg	0.0	10.5	13.1	122.8	75-125%
Chromium, Hexavalent	GP42383/GN2444	DA77507-6	mg/kg	0.0	747	864	115.6	75-125%

Associated Samples:

Batch GP42383: DA77508-1C, DA77508-2C, DA77508-3C, DA77508-4C

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

11.2
11

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA77508
Account: ALMS - SGS Wheat Ridge, CO
Project: CIVITCOW: ENSOCOWR: Dutch Lake 22-34H

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chromium, Hexavalent	GP42383/GN2444	DA77507-6	mg/kg	0.0	20.9	24.6	61.0*(a)	20%

Associated Samples:

Batch GP42383: DA77508-1C, DA77508-2C, DA77508-3C, DA77508-4C

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) High RPD due to possible sample non-homogeneity/double spike.