December 07, 2017 Service Request No:J1708196

Sara Armour
Florida Department of Environmental Protection
Bureau of Laboratories
2600 Blair Stone Road
Tallahassee, FL 32399

Laboratory Results for: Nassau West

Dear Sara,

Enclosed are the results of the sample(s) submitted to our laboratory December 04, 2017
For your reference, these analyses have been assigned our service request number **J1708196.**

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Gina Bondani
Project Manager

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Narrative Documents

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Client: Florida DEP
Project: Nassau West/RQ2017-12-04-37
Sample Matrix: Water

Service Request:J1708196
Date Received:12/4/17

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier I data deliverables. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

Sample Receipt

1 water samples were received for analysis at ALS Environmental on 12/4/17. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at ≤6°C upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

Microbiology Analyses:

ASTM D6503: Incubation end time and sample read time was 12/5/17 1707

Approved by _____ Date 12/7/2017

SAMPLE DETECTION SUMMARY

CLIENT ID: G4NE026012042017	Lab ID: J1708196-001					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Escherichia coli	355		10	10	MPN/100m	SM 9223 B

Sample Receipt Information

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Client: Florida DEP **Service Request:**J1708196
Project: Nassau West/RQ2017-12-04-37

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
J1708196-001	G4NE026012042017	12/4/2017	0930

ALS Environmental

Cooler Receipt Form

Client: FDEP Service Request #: J1708196

Project: Nassau West Shipping paid by ALS?

Cooler received on 12/4/17 and opened on 12/4/17 by RY Yes No (N/A)

COURIER: ALS UPS FEDEX DHL (Client) Other _____ Airbill # _____

1	Were custody seals on outside of cooler?	Yes	(No)				
	If yes, how many and where?	#:___	on lid	other			
2	Were seals intact and signature and date correct?	Yes	No	(N/A)			
3	Were custody papers properly filled out?	(Yes)	No	N/A			
4	Temperature of cooler(s) upon receipt (Should be 0°C and ≤ 6°C)	2.8					
5	Thermometer ID	T124					
6	Temperature Blank Present?	Yes	(No)				
7	Were Ice or Ice Packs present	(Ice)	Ice Packs	No			
8	Did all bottles arrive in good condition (unbroken, etc....)?	(Yes)	No	N/A			
9	Type of packing material present	Netting	Vial Holder	Bubble Wrap			
		Paper	Styrofoam	Other	(N/A)		
10	Were all bottle labels complete (sample ID, preservation, etc....)?	(Yes)	No	N/A			
11	Did all bottle labels and tags agree with custody papers?	(Yes)	No	N/A			
12	Were the correct bottles used for the tests indicated?	(Yes)	No	N/A			
13	Were all of the preserved bottles received with the appropriate preservative?	Yes	No	(N/A)			
	HNO3 pH<2 H2SO4 pH<2 ZnAc2/NaOH pH>9 NaOH pH>12 HCl pH<2						
	Preservative additions noted below						
14	Were all samples received within analysis holding times?	(Yes)	No	N/A			
15	Were VOA vials free of air bubbles greater than 6mm? If present, note below	Yes	No	(N/A)			
16	Where did the bottles originate?	ALS	(Client)				

Sample ID	Reagent	Lot #	ml added	Initials Date/Time

Additional comments and/or explanation of all discrepancies noted above:

Client approval to run samples if discrepancies noted: Date:

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

ALS Environmental

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PAGE 1 OF 1

SR# 51708196
CAS Contract

Project Name: Nassau West	Project Number: RQ2017-12-04-37
Project Manager: Jeremy Parrish	Email Address: jeremy.m.parrish@dep.state.fl.us
Company/Address: FDEP	
8800 Baymeadows Way W STE 100	
Jacksonville FL 32256	
Phone #: 904-256-1700	FAX #:
Sampler's Signature: Patrick O'Connor	Sampler's Printed Name: P. O'Connor

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: 8

J1708196 5
Florida Department of Environmental Protection
Nassau West

NUMBER OF CONTAINERS: E. Coli

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other ICE

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	REMARKS/ ALTERNATE DESCRIPTION
GHNE0260012042017		12-4-17	0930	SW	1	

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SPECIAL INSTRUCTIONS/COMMENTS

See QAPP ☐

SAMPLE RECEIPT: CONDITION/COOLER TEMP: 2.8 CUSTODY SEALS: Y N

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ STANDARD
REQUESTED FAX DATE
_____
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
____ V. Specialized Forms / Custom Report
Edata ____Yes ____No

INVOICE INFORMATION
PO #
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Amy Kalmbacher	Printed Name: Renee Futch	Printed Name	Printed Name	Printed Name	Printed Name
Firm: FDEP	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 12/4/2017 1245	Date/Time: 12/4/17 1245	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Retained by Client

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Miscellaneous Forms

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FLORIDA DEP DATA QUALIFIERS

B Results based upon colony counts outside the acceptable range.

D Measurement was made in the field.

H Value based on field kit determination; results may not be accurate.

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J Estimated value (one of the following reasons is discussed in the project case narrative).
1. The result may be inaccurate because the surrogate recovery limits have been exceeded.
2. No known quality control criteria exists for the component.
3. The reported value failed to meet the established quality control criteria for either precision or accuracy.
4. The sample matrix interfered with the ability to make any accurate determination (e.g., primary and confirmation results show greater than 40% RPD).
5. The data is questionable because of improper laboratory or field protocols (e.g., GC/MS Tune did not meet method criteria).

K Off scale low. The value is less than the lowest calibration standard but greater than the method reporting limit (MRL).

L Off scale high. The analyte is above the upper limit of the linear calibration range.

M The MDL/MRL has been elevated because the analyte could not be accurately quantified due to matrix interference.

N Presumptive evidence of the analyte. Confirmation was not performed.

Q Sample held beyond the accepted holding time.

T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only.

U Indicates that the compound was analyzed for but not detected.

V Indicates that the analyte was detected in both the sample and the associated method blank.

Y The laboratory analysis was from an improperly preserved sample.

Z Too many colonies were present (TNTC). The numeric value represents the filtration volume.

Jacksonville Lab ID # for State Certifications[1]

Agency	Number	Expiration Date
Department of Defense	66206	7/31/2018
Florida Department of Health	E82502	6/30/2018
Georgia Department of Natural Resources	958	6/30/2018
Kentucky Division of Waste Management	123042	6/30/2018
Louisiana Department of Environmental Quality	02086	6/30/2018
Maine Department of Health and Human Services	2015002	2/3/2019
North Carolina Department of Environment and Natural Resources	527	12/31/2017
Pennsylvania Department of Environmental Protection	68-04835	8/31/2018
South Carolina Department of Health and Environmental Control	96021001	6/30/2018
Texas Commission on Environmental Quality	T104704197-16-8	5/31/2018
Virginia Environmental Accreditation Program	460191	12/14/2017

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ACRONYMS

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Florida DEP	**Service Request:**	J1708196
Project:	Nassau West/RQ2017-12-04-37		

Sample Name:	G4NE026012042017	**Date Collected:**	12/4/17
Lab Code:	J1708196-001	**Date Received:**	12/4/17
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
SM 9223 B		AVONEBERSTEIN

Sample Results

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Microbiology

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Analytical Report

Client:	Florida DEP	**Service Request:**	J1708196
Project:	Nassau West/RQ2017-12-04-37	**Date Collected:**	12/04/17 09:30
Sample Matrix:	Water	**Date Received:**	12/04/17 12:45
Sample Name:	G4NE026012042017	**Basis:**	NA
Lab Code:	J1708196-001		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	Dil.	Date Analyzed	Q
Escherichia coli	SM 9223 B	**355**	MPN/100mL	10	10	12/04/17 15:11	

QC Summary Forms

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Analytical Report

Client:	Florida DEP	**Service Request:**	J1708196
Project:	Nassau West/RQ2017-12-04-37	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	J1708196-MB		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	Dil.	Date Analyzed	Q
Escherichia coli	SM 9223 B	1.0 U	MPN/100mL	1.0	1	12/04/17 15:11	