October 29, 2019 Service Request No:J1906427

Mr. Jeremy Parrish
Florida DEP
8800 Baymeadows Way West
Jacksonville, FL 32256-7577

Laboratory Results for: Nassau West

Dear Mr.Parrish,

Enclosed are the results of the sample(s) submitted to our laboratory October 24, 2019
For your reference, these analyses have been assigned our service request number **J1906427.**

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 with the TNI 2016 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 4406. You may also contact me via email at Mandy.Sullivan@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mandy Sullivan
Project Manager

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ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

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Client: Florida Department of Environmental Protection (DEP)
Service Request: J1906427
Project: Nassau West
Date Received: 10/24/2019
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier I level requested by the client.

Sample Receipt:

Three water samples were received for analysis at ALS Environmental on 10/24/2019. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Microbiology:

Method SM 9223 B: Sample(s) J1906427 (1-3) were removed from the incubator and read on 10/25/19 1423.

Approved by _____ Date 10/29/2019

SAMPLE DETECTION SUMMARY

CLIENT ID: 19010021			Lab ID: J1906427-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Escherichia coli	45.0			1.0	MPN/100mL	SM 9223 B

CLIENT ID: 19010023			Lab ID: J1906427-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Escherichia coli	236			1.0	MPN/100mL	SM 9223 B

CLIENT ID: 19010136			Lab ID: J1906427-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Escherichia coli	1990			1.0	MPN/100mL	SM 9223 B

Sample Receipt Information

ALS Environmental—Jacksonville Laboratory
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Client: Florida Department of Environmental Protection (DEP) **Service Request:**J1906427
Project: Nassau West/RQ-2019-10-21-28

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
J1906427-001	19010021	10/24/2019	0925
J1906427-002	19010023	10/24/2019	1030
J1906427-003	19010136	10/24/2019	1130

ALS Environmental

Cooler Receipt Form

Client: FL Dep Env Protect Service Request #: J1906427

Project: Nassau West Shipping paid by ALS? Yes No (N/A)

Cooler received on 10/24/19 and opened on 10/24/19 by LM

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	IR89	
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

J1906427 5

Florida DEP
Nassau West

ALS Environmental
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Project Name: Nassau West	Project Number: RQ-2019-10-21-28
Report To: Jeremy Parrish	Report CC: Dep-Overflow micro@dep.state.fl.us
Company/Address: FDEP - 8800 Baymeadows Way W, Jacksonville, FL 32256	
Phone #: 904-256-1700	FAX #
Sampler's Signature: Amy Kalmbacher	Sampler's Printed Name: Amy Kalmbacher

ANALYSIS REQUESTED (Include Method Number an

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	Matrix	Preservative	NUMBER OF CONTAINERS	E. Coli	REMARKS
19010021		10-24	0925	SW		2	✓	Fresh
19010023		↓	1030	↓		2	✓	↓
19010136		↓	1130	↓		2	✓	

Preservative Key
0. None
1. HCL
2. HNO3
3. H2SO4
4. NaOH
5. Zn. Acetate
6. MeOH
7. NaHSO4
8. Other

Special Instructions/Comments:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: 2.8C 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
Edata ___ Yes ___ No

INVOICE INFORMATION
P.O. #
Bill to:

Relinquished By	Received By	Relinquished By	Received By	Relinquished By	Received By
Signature: Amy Kalmbacher	Signature	Signature	Signature	Signature	Signature
Printed Name: Amy Kalmbacher	Printed Name	Printed Name	Printed Name	Printed Name	Printed Name: Lee, Mason
Firm: FDEP	Firm	Firm	Firm	Firm	Firm: ALS
Date/Time: 10-24-2019	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time: 10/24/19 1250

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	6/30/2020
Florida Department of Health	E82502	6/30/2020
Georgia Department of Natural Resources	958	6/30/2020
Kentucky Division of Waste Management	123042	6/30/2020
Louisiana Department of Environmental Quality	02086	6/30/2020
Maine Department of Health and Human Services	2019004	2/3/2021
New York State Department of Health	12113	4/1/2020
North Carolina Department of Environment and Natural Resources	527	12/31/2019
South Carolina Department of Health and Environmental Control	96021001	6/30/2019
Texas Commission on Environmental Quality	T104704197-19-12	5/31/2020
Virginia Environmental Accreditation Program	460191	12/14/2019

[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 Department of Environmental Protection (DEP)	**Service Request:**	J1906427
Project:	Nassau West/RQ-2019-10-21-28		

Sample Name:	19010021	**Date Collected:**	10/24/19
Lab Code:	J1906427-001	**Date Received:**	10/24/19
Sample Matrix:	Water		

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

Sample Name:	19010023	**Date Collected:**	10/24/19
Lab Code:	J1906427-002	**Date Received:**	10/24/19
Sample Matrix:	Water		

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

Sample Name:	19010136	**Date Collected:**	10/24/19
Lab Code:	J1906427-003	**Date Received:**	10/24/19
Sample Matrix:	Water		

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

Sample Results

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Microbiology

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Analytical Report

Client:	Florida Department of Environmental Protection (DEP)	**Service Request:**	J1906427
Project:	Nassau West/RQ-2019-10-21-28	**Date Collected:**	10/24/19 09:25
Sample Matrix:	Water	**Date Received:**	10/24/19 12:50
Sample Name:	19010021	**Basis:**	NA
Lab Code:	J1906427-001		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Escherichia coli	SM 9223 B	**45.0**	MPN/100mL	1.0	1	10/24/19 14:16	

Analytical Report

Client:	Florida Department of Environmental Protection (DEP)	**Service Request:**	J1906427
Project:	Nassau West/RQ-2019-10-21-28	**Date Collected:**	10/24/19 10:30
Sample Matrix:	Water	**Date Received:**	10/24/19 12:50
Sample Name:	19010023	**Basis:**	NA
Lab Code:	J1906427-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Escherichia coli	SM 9223 B	**236**	MPN/100mL	1.0	1	10/24/19 14:16	

Analytical Report

Client:	Florida Department of Environmental Protection (DEP)	**Service Request:**	J1906427
Project:	Nassau West/RQ-2019-10-21-28	**Date Collected:**	10/24/19 11:30
Sample Matrix:	Water	**Date Received:**	10/24/19 12:50
Sample Name:	19010136	**Basis:**	NA
Lab Code:	J1906427-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Escherichia coli	SM 9223 B	**1990**	MPN/100mL	1.0	1	10/24/19 14:16	

QC Summary Forms

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Analytical Report

Client:	Florida Department of Environmental Protection (DEP)	**Service Request:**	J1906427
Project:	Nassau West/RQ-2019-10-21-28	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	J1906427-MB		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Escherichia coli	SM 9223 B	1.0 U	MPN/100mL	1.0	1	10/24/19 14:16	