



July 16, 2019

Service Request No:J1903911

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 July 11, 2019  
For your reference, these analyses have been assigned our service request number **J1903911**.

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.

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

Respectfully submitted,

**ALS Group USA, Corp. dba ALS Environmental**

Mandy Sullivan  
Project Manager

ADDRESS 9143 Philips Highway, Suite 200, Jacksonville, FL 32256  
PHONE +1 904 739 2277 | FAX +1 904 739 2011  
ALS Group USA, Corp.  
dba ALS Environmental



## Narrative Documents

**ALS Environmental—Jacksonville Laboratory**  
9143 Philips Highway, Suite 200, Jacksonville, FL 32256  
Phone (904) 739-2277 Fax (904) 739-2011  
[www.alsglobal.com](http://www.alsglobal.com)



**Client:** Florida Department of Environmental Protection  
(DEP)  
**Project:** Nassau West  
**Sample Matrix:** Water

**Service Request:** J1903911

**Date Received:** 07/11/2019

#### **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:**

Four water samples were received for analysis at ALS Environmental on 07/11/2019. 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) J1903911(1-4) were removed from the incubator and read on 7/12/19 1506.

Approved by 

Date 07/16/2019

### SAMPLE DETECTION SUMMARY

|                            |  |  |                             |  |  |  |
|----------------------------|--|--|-----------------------------|--|--|--|
| <b>CLIENT ID: 19010136</b> |  |  | <b>Lab ID: J1903911-001</b> |  |  |  |
|----------------------------|--|--|-----------------------------|--|--|--|

| Analyte          | Results | Flag | MDL | MRL | Units         | Method    |
|------------------|---------|------|-----|-----|---------------|-----------|
| Escherichia coli | 295     |      |     | 10  | MPN/100m<br>L | SM 9223 B |

|                                |  |  |                             |  |  |  |
|--------------------------------|--|--|-----------------------------|--|--|--|
| <b>CLIENT ID: 19010136 DUP</b> |  |  | <b>Lab ID: J1903911-002</b> |  |  |  |
|--------------------------------|--|--|-----------------------------|--|--|--|

| Analyte          | Results | Flag | MDL | MRL | Units         | Method    |
|------------------|---------|------|-----|-----|---------------|-----------|
| Escherichia coli | 345     |      |     | 10  | MPN/100m<br>L | SM 9223 B |

|                            |  |  |                             |  |  |  |
|----------------------------|--|--|-----------------------------|--|--|--|
| <b>CLIENT ID: 19010023</b> |  |  | <b>Lab ID: J1903911-003</b> |  |  |  |
|----------------------------|--|--|-----------------------------|--|--|--|

| Analyte          | Results | Flag | MDL | MRL | Units         | Method    |
|------------------|---------|------|-----|-----|---------------|-----------|
| Escherichia coli | 41      |      |     | 10  | MPN/100m<br>L | SM 9223 B |

|                            |  |  |                             |  |  |  |
|----------------------------|--|--|-----------------------------|--|--|--|
| <b>CLIENT ID: 19010021</b> |  |  | <b>Lab ID: J1903911-004</b> |  |  |  |
|----------------------------|--|--|-----------------------------|--|--|--|

| Analyte          | Results | Flag | MDL | MRL | Units         | Method    |
|------------------|---------|------|-----|-----|---------------|-----------|
| Escherichia coli | 41      |      |     | 10  | MPN/100m<br>L | SM 9223 B |



## Sample Receipt Information

**ALS Environmental—Jacksonville Laboratory**  
9143 Philips Highway, Suite 200, Jacksonville, FL 32256  
Phone (904) 739-2277 Fax (904) 739-2011  
[www.alsglobal.com](http://www.alsglobal.com)

**Client:** Florida Department of Environmental Protection (DEP)  
**Project:** Nassau West/RQ-2019-07-01-14

**Service Request:**J1903911

**SAMPLE CROSS-REFERENCE**

| <u>SAMPLE #</u> | <u>CLIENT SAMPLE ID</u> | <u>DATE</u> | <u>TIME</u> |
|-----------------|-------------------------|-------------|-------------|
| J1903911-001    | 19010136                | 7/11/2019   | 0935        |
| J1903911-002    | 19010136 DUP            | 7/11/2019   | 0940        |
| J1903911-003    | 19010023                | 7/11/2019   | 1015        |
| J1903911-004    | 19010021                | 7/11/2019   | 1055        |

### Cooler Receipt Form

Client: FDEP Service Request #: SL903911  
 Project: Nassau West Shipping paid by ALS? Yes ☐ No ☒ N/A  
 Cooler received on 7/14/19 and opened on 7/14/19 by BB  
 COURIER: ALS UPS FEDEX DHL ☒ Client Other ☐ Airbill # \_\_\_\_\_

- |    |                                                                                                                                                  |                                                                                                                                                                                                             |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Were custody seals on outside of cooler?                                                                                                         | Yes <input type="radio"/> No <input checked="" type="radio"/>                                                                                                                                               |
|    | If yes, how many and where?                                                                                                                      | #: _____ on lid other <input checked="" type="radio"/> N/A                                                                                                                                                  |
| 2  | Were seals intact and signature and date correct?                                                                                                | Yes <input type="radio"/> No <input checked="" type="radio"/> N/A                                                                                                                                           |
| 3  | Were custody papers properly filled out?                                                                                                         | Yes <input checked="" type="radio"/> No <input type="radio"/> N/A                                                                                                                                           |
| 4  | Temperature of cooler(s) upon receipt (Should be 0°C and ≤ 6°C)                                                                                  | <u>0.0°C</u>                                                                                                                                                                                                |
| 5  | Thermometer ID                                                                                                                                   | <u>1124</u>                                                                                                                                                                                                 |
| 6  | Temperature Blank Present?                                                                                                                       | Yes <input type="radio"/> No <input checked="" type="radio"/>                                                                                                                                               |
| 7  | Were Ice or Ice Packs present                                                                                                                    | Ice <input checked="" type="radio"/> Ice Packs <input type="radio"/> No <input type="radio"/>                                                                                                               |
| 8  | Did all bottles arrive in good condition (unbroken, etc....)?                                                                                    | Yes <input checked="" type="radio"/> No <input type="radio"/> N/A                                                                                                                                           |
| 9  | Type of packing material present                                                                                                                 | Netting <input type="radio"/> Vial Holder <input type="radio"/> Bubble Wrap <input type="radio"/><br>Paper <input type="radio"/> Styrofoam <input type="radio"/> Other <input checked="" type="radio"/> N/A |
| 10 | Were all bottle labels complete (sample ID, preservation, etc....)?                                                                              | Yes <input checked="" type="radio"/> No <input type="radio"/> N/A                                                                                                                                           |
| 11 | Did all bottle labels and tags agree with custody papers?                                                                                        | Yes <input checked="" type="radio"/> No <input type="radio"/> N/A                                                                                                                                           |
| 12 | Were the correct bottles used for the tests indicated?                                                                                           | Yes <input checked="" type="radio"/> No <input type="radio"/> N/A                                                                                                                                           |
| 13 | Were all of the preserved bottles received with the appropriate preservative?                                                                    | Yes <input type="radio"/> No <input checked="" type="radio"/> N/A                                                                                                                                           |
|    | HNO <sub>3</sub> pH<2    H <sub>2</sub> SO <sub>4</sub> pH<2    ZnAc <sub>2</sub> /NaOH pH>9    NaOH pH>12<br>Preservative additions noted below | HCl pH<2                                                                                                                                                                                                    |
| 14 | Were all samples received within analysis holding times?                                                                                         | Yes <input checked="" type="radio"/> No <input type="radio"/> N/A                                                                                                                                           |
| 15 | Were VOA vials free of air bubbles greater than 6mm? If present, note below                                                                      | Yes <input type="radio"/> No <input checked="" type="radio"/> N/A                                                                                                                                           |
| 16 | Where did the bottles originate?                                                                                                                 | ALS <input type="radio"/> Client <input checked="" type="radio"/>                                                                                                                                           |

| 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:





## Miscellaneous Forms

**ALS Environmental—Jacksonville Laboratory**  
9143 Philips Highway, Suite 200, Jacksonville, FL 32256  
Phone (904) 739-2277 Fax (904) 739-2011  
[www.alsglobal.com](http://www.alsglobal.com)



## **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<sup>1</sup>**

| <b>Agency</b>                                                  | <b>Number</b>    | <b>Expiration Date</b> |
|----------------------------------------------------------------|------------------|------------------------|
| 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             |

<sup>1</sup> 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.                           |

**ALS Group USA, Corp.**

dba ALS Environmental

## Analyst Summary report

**Client:** Florida Department of Environmental Protection (DEP)  
**Project:** Nassau West/RQ-2019-07-01-14

**Service Request:** J1903911

**Sample Name:** 19010136  
**Lab Code:** J1903911-001  
**Sample Matrix:** Water

**Date Collected:** 07/11/19**Date Received:** 07/11/19

**Analysis Method**  
SM 9223 B

**Extracted/Digested By**

**Analyzed By**  
ASOTO

**Sample Name:** 19010136 DUP  
**Lab Code:** J1903911-002  
**Sample Matrix:** Water

**Date Collected:** 07/11/19**Date Received:** 07/11/19

**Analysis Method**  
SM 9223 B

**Extracted/Digested By**

**Analyzed By**  
ASOTO

**Sample Name:** 19010023  
**Lab Code:** J1903911-003  
**Sample Matrix:** Water

**Date Collected:** 07/11/19**Date Received:** 07/11/19

**Analysis Method**  
SM 9223 B

**Extracted/Digested By**

**Analyzed By**  
ASOTO

**Sample Name:** 19010021  
**Lab Code:** J1903911-004  
**Sample Matrix:** Water

**Date Collected:** 07/11/19**Date Received:** 07/11/19

**Analysis Method**  
SM 9223 B

**Extracted/Digested By**

**Analyzed By**  
ASOTO



## Sample Results

**ALS Environmental—Jacksonville Laboratory**  
9143 Philips Highway, Suite 200, Jacksonville, FL 32256  
Phone (904) 739-2277 Fax (904) 739-2011  
[www.alsglobal.com](http://www.alsglobal.com)



## Microbiology

**ALS Environmental—Jacksonville Laboratory**  
9143 Philips Highway, Suite 200, Jacksonville, FL 32256  
Phone (904)739-2277 Fax (904)739-2011  
[www.alsglobal.com](http://www.alsglobal.com)

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** Florida Department of Environmental Protection (DEP)  
**Project:** Nassau West/RQ-2019-07-01-14  
**Sample Matrix:** Water  
**Sample Name:** 19010136  
**Lab Code:** J1903911-001

**Service Request:** J1903911  
**Date Collected:** 07/11/19 09:35  
**Date Received:** 07/11/19 12:36  
**Basis:** NA

General Chemistry Parameters

| Analyte Name     | Analysis Method | Result | Units     | MRL | Dil. | Date Analyzed  | Q |
|------------------|-----------------|--------|-----------|-----|------|----------------|---|
| Escherichia coli | SM 9223 B       | 295    | MPN/100mL | 10  | 10   | 07/11/19 14:27 |   |

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** Florida Department of Environmental Protection (DEP)  
**Project:** Nassau West/RQ-2019-07-01-14  
**Sample Matrix:** Water  
**Sample Name:** 19010136 DUP  
**Lab Code:** J1903911-002

**Service Request:** J1903911  
**Date Collected:** 07/11/19 09:40  
**Date Received:** 07/11/19 12:36  
**Basis:** NA

General Chemistry Parameters

| Analyte Name     | Analysis Method | Result | Units     | MRL | Dil. | Date Analyzed  | Q |
|------------------|-----------------|--------|-----------|-----|------|----------------|---|
| Escherichia coli | SM 9223 B       | 345    | MPN/100mL | 10  | 10   | 07/11/19 14:27 |   |

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** Florida Department of Environmental Protection (DEP)  
**Project:** Nassau West/RQ-2019-07-01-14  
**Sample Matrix:** Water  
**Sample Name:** 19010023  
**Lab Code:** J1903911-003

**Service Request:** J1903911  
**Date Collected:** 07/11/19 10:15  
**Date Received:** 07/11/19 12:36  
**Basis:** NA

General Chemistry Parameters

| Analyte Name     | Analysis Method | Result | Units     | MRL | Dil. | Date Analyzed  | Q |
|------------------|-----------------|--------|-----------|-----|------|----------------|---|
| Escherichia coli | SM 9223 B       | 41     | MPN/100mL | 10  | 10   | 07/11/19 14:27 |   |

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** Florida Department of Environmental Protection (DEP)  
**Project:** Nassau West/RQ-2019-07-01-14  
**Sample Matrix:** Water  
**Sample Name:** 19010021  
**Lab Code:** J1903911-004

**Service Request:** J1903911  
**Date Collected:** 07/11/19 10:55  
**Date Received:** 07/11/19 12:36  
**Basis:** NA

General Chemistry Parameters

| Analyte Name     | Analysis Method | Result | Units     | MRL | Dil. | Date Analyzed  | Q |
|------------------|-----------------|--------|-----------|-----|------|----------------|---|
| Escherichia coli | SM 9223 B       | 41     | MPN/100mL | 10  | 10   | 07/11/19 14:27 |   |



## QC Summary Forms

**ALS Environmental - Jacksonville Laboratory**  
9143 Philips Highway, Suite 200, Jacksonville, FL 32256  
Phone (904) 739-2277 Fax (904) 739-2011  
[www.alsglobal.com](http://www.alsglobal.com)



## Microbiology

**ALS Environmental—Jacksonville Laboratory**  
9143 Philips Highway, Suite 200, Jacksonville, FL 32256  
Phone (904)739-2277 Fax (904)739-2011  
[www.alsglobal.com](http://www.alsglobal.com)

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** Florida Department of Environmental Protection (DEP)  
**Project:** Nassau West/RQ-2019-07-01-14  
**Sample Matrix:** Water  
**Sample Name:** Method Blank  
**Lab Code:** J1903911-MB

**Service Request:** J1903911  
**Date Collected:** NA  
**Date Received:** NA  
**Basis:** NA

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    | 07/11/19 14:27 |   |