



November 22, 2017

Service Request No:J1707738

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

Laboratory Results for: LSJR BMAP

Dear Sara,

Enclosed are the results of the sample(s) submitted to our laboratory November 14, 2017
For your reference, these analyses have been assigned our service request number **J1707738**.

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

ALS Environmental—Jacksonville Laboratory
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Phone (904) 739-2277 Fax (904) 739-2011
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Client: Florida DEP
Project: LSJR BMAP/RQ-2017-11-13-25
Sample Matrix: Water

Service Request: J1707738
Date Received: 11/14/17

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

7 water samples were received for analysis at ALS Environmental on 11/14/17. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at $\leq 6^{\circ}\text{C}$ 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 11/15/17 1645

.

SM9223B: Incubation end time and sample read time was 11/15/17 1702

Approved by  Date 11/22/2017

SAMPLE DETECTION SUMMARY

CLIENT ID: G2NE0761		Lab ID: J1707738-001				
Analyte	Results	Flag	MDL	PQL	Units	Method
Escherichia coli	327		10	10	MPN/100m	SM 9223 B
CLIENT ID: G2NE0130		Lab ID: J1707738-002				
Analyte	Results	Flag	MDL	PQL	Units	Method
Enterococcus	260		10	10	MPN/100m	ASTM
CLIENT ID: G2NE0905		Lab ID: J1707738-003				
Analyte	Results	Flag	MDL	PQL	Units	Method
Escherichia coli	2100		10	10	MPN/100m	SM 9223 B
CLIENT ID: G2NE0734		Lab ID: J1707738-004				
Analyte	Results	Flag	MDL	PQL	Units	Method
Escherichia coli	110		10	10	MPN/100m	SM 9223 B
CLIENT ID: G2NE0323		Lab ID: J1707738-005				
Analyte	Results	Flag	MDL	PQL	Units	Method
Escherichia coli	10		10	10	MPN/100m	SM 9223 B
CLIENT ID: G2NE0497		Lab ID: J1707738-006				
Analyte	Results	Flag	MDL	PQL	Units	Method
Escherichia coli	712		10	10	MPN/100m	SM 9223 B
CLIENT ID: G2NE0856		Lab ID: J1707738-007				
Analyte	Results	Flag	MDL	PQL	Units	Method
Escherichia coli	110		10	10	MPN/100m	SM 9223 B



Sample Receipt Information

ALS Environmental—Jacksonville Laboratory
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Phone (904) 739-2277 Fax (904) 739-2011
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Client: Florida DEP
Project: LSJR BMAP/RQ-2017-11-13-25

Service Request:J1707738

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J1707738-001	G2NE0761	11/14/2017	1100
J1707738-002	G2NE0130	11/14/2017	1040
J1707738-003	G2NE0905	11/14/2017	1125
J1707738-004	G2NE0734	11/14/2017	1205
J1707738-005	G2NE0323	11/14/2017	1145
J1707738-006	G2NE0497	11/14/2017	0950
J1707738-007	G2NE0856	11/14/2017	0905

Cooler Receipt Form

Client: FDEP Service Request #: J1707738
 Project: LSJR BMAP Shipping paid by ALS? ☐ Yes ☒ No N/A
 Cooler received on 11/14/17 and opened on 11/14/17 by Sms
 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 <u>N/A</u> |
| 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) | <u>0.90C</u> | | |
| 5 | Thermometer ID | <u>T124</u> | | |
| 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:



ALS

J1707738

Atlantic Springs: 380 Northlake Blvd., Suite 1002 • Atlantic Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597
Gainesville: 2885 SW 41st Blvd. • Gainesville, FL 32608 • 352.377.0046 • Fax 352.385.6639
Jacksonville: 6681 Southpoint Pkwy. • Jacksonville, FL 32216 • 904.336.1100 • Fax 904.336.9354
Miramar: 10200 USA Today Way • Miramar, FL 33025 • 954.889.2268 • Fax 954.889.2281
Tallahassee: 2633 Northwood Circle • Tallahassee, FL 32303 • 904.627.1962 • Fax 850.219.5115
Tampa: 3610 Princess Palm Ave. • Tampa, FL 33610 • 813.636.9616 • Fax 813.630.4327

Client Name: FDEP		Project Name: Run name: LSJR BMAP											
Address: 8800 BAYMEADOWS WAY W JACKSONVILLE, FL. 32256		P.O. Number or Project Number: RQ-2017-11-13-25											
Phone: 904-256-1541		FDEP Facility No: N/A											
FAX:		Project Address: N/A											
Contact: JEREMY PARRISH		Special Instructions:											
Sampled By: NED:		E-mail report to: Dep-Overflowmicro@dep.state.fl.us											
Turn Around Time: ☒ STANDARD ☐ RUSH													
Page: 1 of 1		☐ ADaPT ☐ EQuls ☐ Other											
SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE TIME	MATRIX	NO. COUNT	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED	PRESERVATION	ECOLI-18QT (ECOLI)	ENT-24-QT (ENTERO)	FECAL COLIFORM (fecal coliform)	J1707738 5 Florida Department of Environmental Protection LSJR BMAP	LABORATORY I.D. NUMBER
	G2NE0761	GRAB	11/14/17 1100	SW	1		X						
	G2NE0130							X					
	G2NE0905						X						
	G2NE0734						X						
	G2NE0323						X						
	G2NE0497						X						
	G2NE0856						X						
Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)													
Received on Ice ☒ Yes ☐ No ☐ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked Temperature when received 0.9°C in degrees celcius													
DCN: AD-051 Form last revised 04/30/2015 Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V													
Relinquished by: Date Time Received by: Date Time													
FOR DRINKING WATER USE:													
PWS ID: Contact Person: Phone: Supplier of Water: Site-Address:													



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 Certifications¹

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.

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Florida DEP
Project: LSJR BMAP/RQ-2017-11-13-25

Service Request: J1707738

Sample Name: G2NE0761
Lab Code: J1707738-001
Sample Matrix: Water

Date Collected: 11/14/17**Date Received:** 11/14/17

Analysis Method
SM 9223 B

Extracted/Digested By

Analyzed By
VSPEARS

Sample Name: G2NE0130
Lab Code: J1707738-002
Sample Matrix: Water

Date Collected: 11/14/17**Date Received:** 11/14/17

Analysis Method
ASTM D6503-99

Extracted/Digested By

Analyzed By
VSPEARS

Sample Name: G2NE0905
Lab Code: J1707738-003
Sample Matrix: Water

Date Collected: 11/14/17**Date Received:** 11/14/17

Analysis Method
SM 9223 B

Extracted/Digested By

Analyzed By
VSPEARS

Sample Name: G2NE0734
Lab Code: J1707738-004
Sample Matrix: Water

Date Collected: 11/14/17**Date Received:** 11/14/17

Analysis Method
SM 9223 B

Extracted/Digested By

Analyzed By
VSPEARS

Sample Name: G2NE0323
Lab Code: J1707738-005
Sample Matrix: Water

Date Collected: 11/14/17**Date Received:** 11/14/17

Analysis Method
SM 9223 B

Extracted/Digested By

Analyzed By
VSPEARS

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Florida DEP
Project: LSJR BMAP/RQ-2017-11-13-25

Service Request: J1707738

Sample Name: G2NE0497
Lab Code: J1707738-006
Sample Matrix: Water

Date Collected: 11/14/17**Date Received:** 11/14/17

Analysis Method
SM 9223 B

Extracted/Digested By

Analyzed By
VSPEARS

Sample Name: G2NE0856
Lab Code: J1707738-007
Sample Matrix: Water

Date Collected: 11/14/17**Date Received:** 11/14/17

Analysis Method
SM 9223 B

Extracted/Digested By

Analyzed By
VSPEARS



Sample Results

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Microbiology

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Florida DEP
Project: LSJR BMAP/RQ-2017-11-13-25
Sample Matrix: Water
Analysis Method: ASTM D6503-99

Service Request: J1707738
Date Collected: 11/14/17
Date Received: 11/14/17
Units: MPN/100mL
Basis: NA

Enterococcus

Sample Name	Lab Code	Result	PQL	Dil.	Date Analyzed	Q
G2NE0130	J1707738-002	260	10	10	11/14/17 14:47	
Method Blank	J1707738-MB	1.0 U	1.0	1	11/14/17 14:47	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Florida DEP
Project: LSJR BMAP/RQ-2017-11-13-25
Sample Matrix: Water
Analysis Method: SM 9223 B

Service Request: J1707738
Date Collected: 11/14/17
Date Received: 11/14/17
Units: MPN/100mL
Basis: NA

Escherichia coli

Sample Name	Lab Code	Result	PQL	Dil.	Date Analyzed	Q
G2NE0761	J1707738-001	327	10	10	11/14/17 16:26	
G2NE0905	J1707738-003	2100	10	10	11/14/17 16:26	
G2NE0734	J1707738-004	110	10	10	11/14/17 16:26	
G2NE0323	J1707738-005	10	10	10	11/14/17 16:26	
G2NE0497	J1707738-006	712	10	10	11/14/17 16:26	
G2NE0856	J1707738-007	110	10	10	11/14/17 16:26	
Method Blank	J1707738-MB	1.0 U	1.0	1	11/14/17 16:26	