



February 22, 2018

Service Request No:J1801168

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

Laboratory Results for: LSJR North Salt

Dear Sara,

Enclosed are the results of the sample(s) submitted to our laboratory February 15, 2018
For your reference, these analyses have been assigned our service request number **J1801168**.

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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Table of Contents

CoverLetter	1
Table of Contents	2
Narrative Documents	4
Narrative Documents	5
Hit Summary List	6
Sample Receipt Information	7
Sample Cross-Reference	8
Chain Of Custody	9
Miscellaneous Forms	11
Qualifiers	12
Acronyms	14
Analyst Summary	15
Sample Results	17
Microbiology	18
ASTM D6503-99 - General Chemistry Parameters	
G2NE1138 - Microbiology	19
20030125 - Microbiology	20
20030126 - Microbiology	21
20030121 - Microbiology	22
20030115 - Microbiology	23
20030124 - Microbiology	24
QC Summary Forms	25

Table of Contents (continued)

Microbiology	26
ASTM D6503-99 - General Chemistry Parameters	
Method Blank - Microbiology	27



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 North Salt/2018-02-12-15
Sample Matrix: Water

Service Request: J1801168
Date Received: 2/15/18

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

6 water samples were received for analysis at ALS Environmental on 2/15/18. 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 2/16/18 1504

Approved by  Date 2/22/2018

SAMPLE DETECTION SUMMARY

CLIENT ID: G2NE1138		Lab ID: J1801168-001				
Analyte	Results	Flag	MDL	PQL	Units	Method
Enterococcus	86		10	10	MPN/100m	ASTM
CLIENT ID: 20030125		Lab ID: J1801168-002				
Analyte	Results	Flag	MDL	PQL	Units	Method
Enterococcus	41		10	10	MPN/100m	ASTM
CLIENT ID: 20030126		Lab ID: J1801168-003				
Analyte	Results	Flag	MDL	PQL	Units	Method
Enterococcus	86		10	10	MPN/100m	ASTM
CLIENT ID: 20030121		Lab ID: J1801168-004				
Analyte	Results	Flag	MDL	PQL	Units	Method
Enterococcus	52		10	10	MPN/100m	ASTM
CLIENT ID: 20030115		Lab ID: J1801168-005				
Analyte	Results	Flag	MDL	PQL	Units	Method
Enterococcus	20		10	10	MPN/100m	ASTM
CLIENT ID: 20030124		Lab ID: J1801168-006				
Analyte	Results	Flag	MDL	PQL	Units	Method
Enterococcus	31		10	10	MPN/100m	ASTM



Sample Receipt Information

ALS Environmental—Jacksonville Laboratory
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Client: Florida DEP
Project: LSJR North Salt/2018-02-12-15

Service Request:J1801168

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J1801168-001	G2NE1138	2/15/2018	0930
J1801168-002	20030125	2/15/2018	1015
J1801168-003	20030126	2/15/2018	1030
J1801168-004	20030121	2/15/2018	1055
J1801168-005	20030115	2/15/2018	1115
J1801168-006	20030124	2/15/2018	1140

Cooler Receipt Form

Client: FTDEP Service Request #: 51801168
 Project: CSSR North Salt Shipping paid by ALS? Yes No N/A
 Cooler received on 2/15/18 and opened on 2/15/18 by LT
 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) 1.0 _____
- 5 Thermometer ID 7138 _____
- 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?
 HNO3 pH<2 H2SO4 pH<2 ZnAc2/NaOH pH>9 NaOH pH>12 HCl pH<2
 Preservative additions noted below Yes No N/A
- 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:

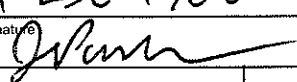
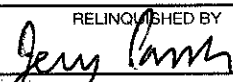


CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

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PAGE 1 OF 1

SR# 51801168
CAS Contract

Project Name LSJR North Salt		Project Number 2018-02-12-15		ANALYSIS REQUESTED (Include Method Number and Container Preservative)																									
Project Manager Jeremy Parish		Email Address Jeremy.n.parrish@state.fl.us		PRESERVATIVE 8																									
Company/Address FDcp 8500 Baymeadows Way West Jax Fl. 32256				NUMBER OF CONTAINERS Envelope	J1801168 Florida Department of Environmental Protection LSJR North Salt 														5 Preservative Key 0. NONE 1. HCL 2. HNO ₃ 3. H ₂ SO ₄ 4. NaOH 5. Zn. Acetate 6. MeOH 7. NaHSO ₄ 8. Other Fe										
Phone # 904 256 1700		FAX #			REMARKS/ ALTERNATE DESCRIPTION																								
Sampler's Signature 		Sampler's Printed Name Jeremy Parish																											
CLIENT SAMPLE ID		LAB ID			SAMPLING DATE		TIME		MATRIX																				
62NE1138				2/15/18		930		SW		1		X																	
20030125				2/15/18		1015		SW		1		X																	
20030126				2/15/18		1030		SW		1		X																	
20030121				2/15/18		1055		SW		1		Y																	
20030115				2/15/18		1115		SW		1		X																	
20030124				2/15/18		1140		SW		1		X																	
SPECIAL INSTRUCTIONS/COMMENTS																		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:			
See QAPP ☐																													
SAMPLE RECEIPT: CONDITION/COOLER TEMP: 16.0 CUSTODY SEALS: Y N																													
RELINQUISHED BY 				RECEIVED BY 				RELINQUISHED BY				RECEIVED BY				RELINQUISHED BY				RECEIVED BY									
Signature				Signature				Signature				Signature				Signature				Signature									
Printed Name Jeremy Parish				Printed Name Jerree Hutch				Printed Name				Printed Name				Printed Name				Printed Name									
Firm FDcp				Firm ALS				Firm				Firm				Firm				Firm									
Date/Time 2/15/18 1305				Date/Time 2/15/18 1305				Date/Time				Date/Time				Date/Time				Date/Time									



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	12/31/2018
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	12/14/2018

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 North Salt/2018-02-12-15

Service Request: J1801168

Sample Name: G2NE1138
Lab Code: J1801168-001
Sample Matrix: Water

Date Collected: 02/15/18**Date Received:** 02/15/18

Analysis Method
ASTM D6503-99

Extracted/Digested By

Analyzed By
AVONEBERSTEIN

Sample Name: 20030125
Lab Code: J1801168-002
Sample Matrix: Water

Date Collected: 02/15/18**Date Received:** 02/15/18

Analysis Method
ASTM D6503-99

Extracted/Digested By

Analyzed By
AVONEBERSTEIN

Sample Name: 20030126
Lab Code: J1801168-003
Sample Matrix: Water

Date Collected: 02/15/18**Date Received:** 02/15/18

Analysis Method
ASTM D6503-99

Extracted/Digested By

Analyzed By
AVONEBERSTEIN

Sample Name: 20030121
Lab Code: J1801168-004
Sample Matrix: Water

Date Collected: 02/15/18**Date Received:** 02/15/18

Analysis Method
ASTM D6503-99

Extracted/Digested By

Analyzed By
AVONEBERSTEIN

Sample Name: 20030115
Lab Code: J1801168-005
Sample Matrix: Water

Date Collected: 02/15/18**Date Received:** 02/15/18

Analysis Method
ASTM D6503-99

Extracted/Digested By

Analyzed By
AVONEBERSTEIN

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Florida DEP
Project: LSJR North Salt/2018-02-12-15

Service Request: J1801168

Sample Name: 20030124
Lab Code: J1801168-006
Sample Matrix: Water

Date Collected: 02/15/18
Date Received: 02/15/18

Analysis Method
ASTM D6503-99

Extracted/Digested By

Analyzed By
AVONEBERSTEIN



Sample Results

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Analytical Report

Client: Florida DEP
Project: LSJR North Salt/2018-02-12-15
Sample Matrix: Water

Sample Name: G2NE1138
Lab Code: J1801168-001

Service Request: J1801168
Date Collected: 02/15/18 09:30
Date Received: 02/15/18 13:05

Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	Dil.	Date Analyzed	Q
Enterococcus	ASTM D6503-99	86	MPN/100mL	10	10	02/15/18 14:00	

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Analytical Report

Client: Florida DEP
Project: LSJR North Salt/2018-02-12-15
Sample Matrix: Water
Sample Name: 20030125
Lab Code: J1801168-002

Service Request: J1801168
Date Collected: 02/15/18 10:15
Date Received: 02/15/18 13:05
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	Dil.	Date Analyzed	Q
Enterococcus	ASTM D6503-99	41	MPN/100mL	10	10	02/15/18 14:00	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Florida DEP
Project: LSJR North Salt/2018-02-12-15
Sample Matrix: Water
Sample Name: 20030126
Lab Code: J1801168-003

Service Request: J1801168
Date Collected: 02/15/18 10:30
Date Received: 02/15/18 13:05
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	Dil.	Date Analyzed	Q
Enterococcus	ASTM D6503-99	86	MPN/100mL	10	10	02/15/18 14:00	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Florida DEP
Project: LSJR North Salt/2018-02-12-15
Sample Matrix: Water
Sample Name: 20030121
Lab Code: J1801168-004

Service Request: J1801168
Date Collected: 02/15/18 10:55
Date Received: 02/15/18 13:05
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	Dil.	Date Analyzed	Q
Enterococcus	ASTM D6503-99	52	MPN/100mL	10	10	02/15/18 14:00	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Florida DEP
Project: LSJR North Salt/2018-02-12-15
Sample Matrix: Water
Sample Name: 20030115
Lab Code: J1801168-005

Service Request: J1801168
Date Collected: 02/15/18 11:15
Date Received: 02/15/18 13:05
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	Dil.	Date Analyzed	Q
Enterococcus	ASTM D6503-99	20	MPN/100mL	10	10	02/15/18 14:00	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Florida DEP
Project: LSJR North Salt/2018-02-12-15
Sample Matrix: Water
Sample Name: 20030124
Lab Code: J1801168-006

Service Request: J1801168
Date Collected: 02/15/18 11:40
Date Received: 02/15/18 13:05
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	Dil.	Date Analyzed	Q
Enterococcus	ASTM D6503-99	31	MPN/100mL	10	10	02/15/18 14:00	



QC Summary Forms

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Microbiology

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dba ALS Environmental

Analytical Report

Client: Florida DEP
Project: LSJR North Salt/2018-02-12-15
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: J1801168-MB

Service Request: J1801168
Date Collected: NA
Date Received: NA
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	Dil.	Date Analyzed	Q
Enterococcus	ASTM D6503-99	1.0 U	MPN/100mL	1.0	1	02/15/18 14:00	