UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 4 Laboratory Services and Applied Science Division
980 College Station Road, Athens, Georgia 30605-2700
D.A.R.T. Id: 21-0217
Project: 21-0217, Piney Point - Phase 1 - Reported by Floyd Wellborn

April 12, 2021

MEMORANDUM

SUBJECT: FINAL Analytical Report
Project: 21-0217, Piney Point - Phase 1

FROM: Floyd Wellborn
LSB Inorganic Chemistry Section Chief

THRU: Sandra Aker, Chief
Laboratory Services Branch

TO: Floyd Wellborn

Attached are the final results for the analytical groups listed below. This report shall not be reproduced except in full without approval of the Region 4 laboratory. These analyses were performed in accordance with the Laboratory Services Branch's Laboratory Operations and Quality Assurance Manual (LSB LOQAM) found at www.epa.gov/region4/sesd/asbsop. Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the LSB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Chapter 5 of the LSB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report:	Method Used:	Accreditations:
Classical/Nutrient Analyses (CNA)		
Classical/Nutrients	EPA 300.0 (Water)	ISO
Classical/Nutrients	EPA 300.0 (Water)	ISO/DW

Sample Disposal Policy

Due to limited space for long term sample storage, LSB's policy is to dispose of samples on a periodic schedule. Air samples collected in summa canisters will be disposed of 30 days following the issuance of this report. All other sample media including original samples, sample extracts and or digestates will be disposed of, in accordance with applicable regulations, 60 days from the date of this report.

This sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time. If samples require storage beyond the 60-day period, please contact the Sample Control Coordinator by e-mail at R4SampleCustody@epa.gov.

cc: Nardina Turner

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SAMPLES INCLUDED IN THIS REPORT

Project: 21-0217, Piney Point - Phase 1

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
NW. Ditch	E211509-01	Saline Water	4/8/21 10:51	4/9/21 10:50
Decant Outfall	E211509-02	Saline Water	4/8/21 11:52	4/9/21 10:50

DATA QUALIFIER DEFINITIONS

J The identification of the analyte is acceptable; the reported value is an estimate.

QM-1 Matrix Spike Recovery less than method control limits

ACRONYMS AND ABBREVIATIONS

CAS Chemical Abstracts Service

Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System (www.epa.gov/srs), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.

MDL Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.

MRL Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.

TIC Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

ACCREDITATIONS:

ISO Accredited to ISO/IEC 17025:2017 and accreditation requirements for Forensic Science Testing Laboratories.

Refer to the certificate and scope of accreditation FT-0330 at:
http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd

NR Not accredited for this test.

DW Accredited for conformance with ISO/IEC 17025:2017 and testing elements in the Fifth Edition of the Manual for the Certification of Laboratories Analyzing Drinking Water, EPA 815-R-05-004, 2005.

Refer to the certificate and scope of accreditation AT-2628 at:
http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd

ISO/DW Accredited to ISO/IEC 17025:2017 and accreditation requirements for Forensic Science Testing Labs, and conformance with ISO/IEC 17025:2017 and testing elements in the Manual for the Certification of Laboratories Analyzing Drinking Water.

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Classical/Nutrient Analyses

Project: 21-0217, Piney Point - Phase 1

Sample ID: NW. Ditch
Station ID:

Lab ID: E211509-01
Matrix: Saline Water

Date Collected: 4/8/21 10:51

CAS Number	Analyte	Results	Qualifiers	Units	MDL / MRL	Prepared	Analyzed	Method
16887-00-6	Chloride	5600		mg/L	0.13 / 1.0	4/09/21 14:53	4/10/21 22:27	EPA 300.0
16984-48-8	Fluoride	5.5		mg/L	0.016 / 0.10	4/11/21 12:43	4/11/21 18:21	EPA 300.0
14808-79-8	Sulfate as SO4	3900		mg/L	0.19 / 1.0	4/09/21 14:53	4/10/21 22:27	EPA 300.0

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Classical/Nutrient Analyses

Project: 21-0217, Piney Point - Phase 1

Sample ID: Decant Outfall
Station ID:

Lab ID: E211509-02
Matrix: Saline Water

Date Collected: 4/8/21 11:52

CAS Number	Analyte	Results	Qualifiers	Units	MDL / MRL	Prepared	Analyzed	Method
16887-00-6	Chloride	4600		mg/L	0.13 / 1.0	4/09/21 14:53	4/10/21 22:44	EPA 300.0
16984-48-8	Fluoride	4.3	J, QM-1	mg/L	0.016 / 0.10	4/11/21 12:43	4/11/21 18:38	EPA 300.0
14808-79-8	Sulfate as SO4	3100		mg/L	0.19 / 1.0	4/09/21 14:53	4/10/21 22:44	EPA 300.0

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Classical/Nutrient Analyses (CNA) - Quality Control
US-EPA, Region 4, LSASD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2104032 - C 300.0 Ion Chromat										
Blank (2104032-BLK1)				Prepared: 04/09/21 Analyzed: 04/10/21						
EPA 300.0										
Chloride	U	0.10	mg/L							U
Sulfate as SO4	U	0.10	"							U
LCS (2104032-BS1)				Prepared: 04/09/21 Analyzed: 04/10/21						
EPA 300.0										
Chloride	250.34	0.10	mg/L	250.00		100	90-110			
Sulfate as SO4	249.64	0.10	"	250.00		99.9	90-110			
Matrix Spike (2104032-MS1)		**Source: E211509-02**		Prepared: 04/09/21 Analyzed: 04/10/21						
EPA 300.0										
Chloride	676.52		mg/L	200.00	458.25	109	90-110			
Sulfate as SO4	526.81		"	200.00	313.38	107	90-110			
Matrix Spike Dup (2104032-MSD1)		**Source: E211509-02**		Prepared: 04/09/21 Analyzed: 04/10/21						
EPA 300.0										
Chloride	678.94		mg/L	200.00	458.25	110	90-110	0.356	10	
Sulfate as SO4	529.44		"	200.00	313.38	108	90-110	0.499	10	
MRL Verification (2104032-PS1)				Prepared: 04/09/21 Analyzed: 04/10/21						
EPA 300.0										
Chloride	46.833	0.10	mg/L	50.000		93.7	70-130			MRL-2
Sulfate as SO4	45.740	0.10	"	50.000		91.5	70-130			MRL-2
Batch 2104036 - C 300.0 Ion Chromat										
Blank (2104036-BLK1)				Prepared & Analyzed: 04/11/21						
EPA 300.0										
Fluoride	U	0.050	mg/L							U
LCS (2104036-BS1)				Prepared & Analyzed: 04/11/21						
EPA 300.0										
Fluoride	5.0370	0.050	mg/L	5.0000		101	90-110			

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Classical/Nutrient Analyses (CNA) - Quality Control

US-EPA, Region 4, LSASD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2104036 - C 300.0 Ion Chromat										
Matrix Spike (2104036-MS1)		**Source: E211509-02**		Prepared & Analyzed: 04/11/21						
EPA 300.0										
Fluoride	2.8430		mg/L	1.0000	2.1660	67.7	90-110			QM-1
Matrix Spike Dup (2104036-MSD1)		**Source: E211509-02**		Prepared & Analyzed: 04/11/21						
EPA 300.0										
Fluoride	2.8050		mg/L	1.0000	2.1660	63.9	90-110	1.35	10	QM-1
MRL Verification (2104036-PS1)				Prepared & Analyzed: 04/11/21						
EPA 300.0										
Fluoride	0.046000	0.050	mg/L	0.050000		92.0	70-130			MRL-2

Notes and Definitions for QC Samples

U	The analyte was not detected at or above the reporting limit.
MRL-2	MRL verification for Non-Potable Water matrix
QM-1	Matrix Spike Recovery less than method control limits