



# Mosaic Fertilizer, L.L.C.

## Environmental Lab



NELAP Certification #  
E 84578

### ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAP STANDARDS

Work Order Number: S208117

Client: Wingate

Project Name: Outfalls - D-004 Monthly

Date Received: 08/12/2022

Time Received: 11:55

Lab ID: S208117-01 (Water)      Sample Description: MWG-D-004  
 Date Sampled: 08/12/2022      Sample Method: Grab  
 Time Sampled: 10:35      Source ID: 019004

Parameter	Result	Error	Qualifier	Units	MDL	PQL	Procedure	Analysis		Analyst
								Date	Time	
Chlorophyll a - free of pheophytin	21.0			ug/L	0.07	0.28	EPA 445	08/26/2022	10:46	DJ
Fluoride	1.54			mg/L	0.160	0.600	EPA 300.0	08/24/2022	08:23	AC
Nitrate-Nitrite	0.0400		U	mg/L	0.0400	0.160	EPA 353.2	08/18/2022	13:01	KW
Phosphorus, Total	0.637			mg/L	0.0500	0.200	EPA 365.4	08/18/2022	13:12	KW
Residue-fixed	1.20			mg/L	1.00	1.00	EPA 160.4	08/15/2022	08:33	DJ
Residue-nonfilterable (TSS)	3.20			mg/L	1.00	1.00	SM 2540 D	08/15/2022	08:33	DJ
Sulfate	187			mg/L	2.80	10.0	EPA 300.0	08/24/2022	08:23	AC
Total Kjeldahl Nitrogen	0.882		J-3	mg/L	0.100	0.400	EPA 351.2	08/18/2022	13:12	KW
Total N	0.882			mg/L	0.140	0.560	TKN + Total nitrate-nitrite	08/18/2022	13:12	KW
Arsenic	0.0111		I, V	mg/L	0.00300	0.0120	EPA 200.7	08/30/2022	12:55	VB
Dissolved Oxygen Saturation	69.3			per cent			FT 1500	08/12/2022	10:35	KC
Flow Rate	23.0			MGD			FT 1800	08/12/2022	10:35	KC
pH	7.28			SU			FT 1100	08/12/2022	10:35	KC
Specific Conductance	596			umhos/cm			FT 1200	08/12/2022	10:35	KC
Staff Gauge	0.72			feet			Calculated	08/12/2022	10:35	KC
Water Temperature	30.3			°C			FT 1400	08/12/2022	10:35	KC
Turbidity	2.40			NTU			FT 1600	08/12/2022	10:35	KC
Gross-Alpha	3.6	+/- 2		pCi/L	1.9	1.9	EPA 900.0	08/23/2022	09:36	FRS
Radium-226	0.7	+/- 0.2		pCi/L	0.1	0.1	EPA 903.1	08/24/2022	09:39	FRS
Radium-228	0.8	+/- 0.6	U	pCi/L	0.8	0.8	Ra - 05	08/23/2022	10:18	FRS
Oil and Grease	1.37		U	MG/L	1.37	5.48	EPA 1664A	08/22/2022	10:52	Bench



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### QC REPORT

THESE RESULTS MEET NELAP STANDARDS

Work Order Number: S208117  
Project Name: Outfalls - D-004 Monthly

#### Wet Chemistry - Quality Control

Analyte	Result	Qualifiers	Units	MDL	PQL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch B208191 - DEFAULT PREP Wet Chem</b>											
<b>Blank (B208191-BLK1)</b>				Prepared & Analyzed: 08/15/22							
Residue-nonfilterable (TSS)	1.00	U	mg/L	1.00	1.00						
<b>LCS (B208191-BS1)</b>				Prepared & Analyzed: 08/15/22							
Residue-nonfilterable (TSS)	46.0		mg/L	1.00	1.00	46.2		99.6	90-110		
<b>Duplicate (B208191-DUP1)</b>				Source: S208098-01				Prepared & Analyzed: 08/15/22			
Residue-nonfilterable (TSS)	13.6	J-2	mg/L	1.00	1.00		5.00			92.5	5
<b>Duplicate (B208191-DUP2)</b>				Source: S208099-01				Prepared & Analyzed: 08/15/22			
Residue-nonfilterable (TSS)	8.80		mg/L	1.00	1.00		9.20			4.44	5
<b>Batch B208192 - DEFAULT PREP Wet Chem</b>											
<b>Blank (B208192-BLK1)</b>				Prepared & Analyzed: 08/15/22							
Residue-fixed	1.00	U	mg/L	1.00	1.00						
<b>Duplicate (B208192-DUP1)</b>				Source: S208098-01				Prepared & Analyzed: 08/15/22			
Residue-fixed	9.20	J-2	mg/L	1.00	1.00		2.60			112	5
<b>Batch B208229 - Nutrient Prep</b>											
<b>Blank (B208229-BLK1)</b>				Prepared & Analyzed: 08/18/22							
Total Kjeldahl Nitrogen	0.100	U	mg/L	0.100	0.400						
Phosphorus, Total	0.0500	U	mg/L	0.0500	0.200						
<b>Blank (B208229-BLK2)</b>				Prepared & Analyzed: 08/18/22							
Total Kjeldahl Nitrogen	0.100	U	mg/L	0.100	0.400						
Phosphorus, Total	0.0500	U	mg/L	0.0500	0.200						



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Analyte	Result	Qualifiers	Units	MDL	PQL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch B208229 - Nutrient Prep</b>											
<b>LCS (B208229-BS1)</b>											
						Prepared & Analyzed: 08/18/22					
Phosphorus, Total	2.11		mg/L	0.0500	0.200	2.00		105	90-110		
Total Kjeldahl Nitrogen	2.12		mg/L	0.100	0.400	2.00		106	90-110		
<b>LCS (B208229-BS2)</b>											
						Prepared & Analyzed: 08/18/22					
Total Kjeldahl Nitrogen	1.90		mg/L	0.100	0.400	2.00		95.1	90-110		
Phosphorus, Total	2.01		mg/L	0.0500	0.200	2.00		100	90-110		
<b>Duplicate (B208229-DUP1)</b>											
			<b>Source: S208117-01</b>			Prepared & Analyzed: 08/18/22					
Phosphorus, Total	0.629		mg/L	0.0500	0.200		0.637			1.26	30
Total Kjeldahl Nitrogen	0.902	J-3	mg/L	0.100	0.400		0.882			2.24	30
<b>Duplicate (B208229-DUP2)</b>											
			<b>Source: S208128-01</b>			Prepared & Analyzed: 08/18/22					
Total Kjeldahl Nitrogen	0.744	J-3	mg/L	0.100	0.400		0.689			7.68	30
Phosphorus, Total	0.974		mg/L	0.0500	0.200		1.02			5.01	30
<b>Duplicate (B208229-DUP3)</b>											
			<b>Source: S208136-01</b>			Prepared & Analyzed: 08/18/22					
Total Kjeldahl Nitrogen	1.04	J-3	mg/L	0.100	0.400		1.06			2.00	30
Phosphorus, Total	0.975		mg/L	0.0500	0.200		0.985			1.02	30
<b>Duplicate (B208229-DUP4)</b>											
			<b>Source: S208142-07</b>			Prepared & Analyzed: 08/18/22					
Total Kjeldahl Nitrogen	6.26	J-3	mg/L	0.200	0.800		6.22			0.593	30
Phosphorus, Total	5.63	J-3	mg/L	0.100	0.400		5.59			0.766	30
<b>Matrix Spike (B208229-MS1)</b>											
			<b>Source: S208117-01</b>			Prepared & Analyzed: 08/18/22					
Total Kjeldahl Nitrogen	2.10	J-3	mg/L	0.100	0.400	1.00	0.882	121	90-110		
Phosphorus, Total	1.68		mg/L	0.0500	0.200	1.00	0.637	104	90-110		
<b>Matrix Spike (B208229-MS2)</b>											
			<b>Source: S208128-01</b>			Prepared & Analyzed: 08/18/22					
Total Kjeldahl Nitrogen	2.00	J-3	mg/L	0.100	0.400	1.00	0.689	131	90-110		
Phosphorus, Total	2.00		mg/L	0.0500	0.200	1.00	1.02	97.4	90-110		



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Analyte	Result	Qualifiers	Units	MDL	PQL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch B208229 - Nutrient Prep</b>											
<b>Matrix Spike (B208229-MS3)</b>			<b>Source: S208136-01</b>			<b>Prepared &amp; Analyzed: 08/18/22</b>					
Phosphorus, Total	2.02		mg/L	0.0500	0.200	1.00	0.985	103	90-110		
Total Kjeldahl Nitrogen	2.40	J-3	mg/L	0.100	0.400	1.00	1.06	134	90-110		
<b>Matrix Spike (B208229-MS4)</b>			<b>Source: S208142-07</b>			<b>Prepared &amp; Analyzed: 08/18/22</b>					
Phosphorus, Total	6.93	J-3	mg/L	0.100	0.400	1.00	5.59	134	90-110		
Total Kjeldahl Nitrogen	5.49	J-3	mg/L	0.200	0.800	1.00	6.22	NR	90-110		
<b>Reference (B208229-SRM1)</b>			<b>Prepared &amp; Analyzed: 08/18/22</b>								
Phosphorus, Total	2.05		mg/L	0.0500	0.200	2.00		103	90-110		
Total Kjeldahl Nitrogen	2.14		mg/L	0.100	0.400	2.00		107	90-110		
<b>Batch B208232 - Nutrient Prep</b>											
<b>Blank (B208232-BLK1)</b>			<b>Prepared &amp; Analyzed: 08/18/22</b>								
Nitrate-Nitrite	0.0400	U	mg/L	0.0400	0.160						
<b>Blank (B208232-BLK2)</b>			<b>Prepared &amp; Analyzed: 08/18/22</b>								
Nitrate-Nitrite	0.0400	U	mg/L	0.0400	0.160						
<b>LCS (B208232-BS1)</b>			<b>Prepared &amp; Analyzed: 08/18/22</b>								
Nitrate-Nitrite	1.05		mg/L	0.0400	0.160	1.00		105	90-110		
<b>LCS (B208232-BS2)</b>			<b>Prepared &amp; Analyzed: 08/18/22</b>								
Nitrate-Nitrite	1.06		mg/L	0.0400	0.160	1.00		106	90-110		
<b>Duplicate (B208232-DUP1)</b>			<b>Source: S208119-01</b>			<b>Prepared &amp; Analyzed: 08/18/22</b>					
Nitrate-Nitrite	0.0400	U	mg/L	0.0400	0.160		U				30



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<b>Batch B208232 - Nutrient Prep</b>											
<b>Duplicate (B208232-DUP2)</b>			<b>Source: S208120-09</b>		<b>Prepared &amp; Analyzed: 08/18/22</b>						
Nitrate-Nitrite	1.10		mg/L	0.0400	0.160		1.11			0.903	30
<b>Duplicate (B208232-DUP3)</b>			<b>Source: S208142-02</b>		<b>Prepared &amp; Analyzed: 08/18/22</b>						
Nitrate-Nitrite	0.0400	U	mg/L	0.0400	0.160		U				30
<b>Matrix Spike (B208232-MS1)</b>			<b>Source: S208119-01</b>		<b>Prepared &amp; Analyzed: 08/18/22</b>						
Nitrate-Nitrite	0.528		mg/L	0.0400	0.160	0.480	U	110	90-110		
<b>Matrix Spike (B208232-MS2)</b>			<b>Source: S208120-09</b>		<b>Prepared &amp; Analyzed: 08/18/22</b>						
Nitrate-Nitrite	1.55		mg/L	0.0400	0.160	0.480	1.11	91.5	90-110		
<b>Matrix Spike (B208232-MS3)</b>			<b>Source: S208142-02</b>		<b>Prepared &amp; Analyzed: 08/18/22</b>						
Nitrate-Nitrite	0.480		mg/L	0.0400	0.160	0.480	U	100	90-110		
<b>Reference (B208232-SRM1)</b>					<b>Prepared &amp; Analyzed: 08/18/22</b>						
Nitrate-Nitrite	1.08		mg/L	0.0400	0.160	1.00		108	0-200		
<b>Batch B208293 - Anion Prep</b>											
<b>Blank (B208293-BLK1)</b>			<b>Prepared &amp; Analyzed: 08/23/22</b>								
Fluoride	0.0800	U	mg/L	0.0800	0.300						
Sulfate	1.40	U	mg/L	1.40	5.00						
<b>Blank (B208293-BLK2)</b>			<b>Prepared &amp; Analyzed: 08/24/22</b>								
Fluoride	0.0800	U	mg/L	0.0800	0.300						
Sulfate	1.40	U	mg/L	1.40	5.00						



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Analyte	Result	Qualifiers	Units	MDL	PQL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch B208293 - Anion Prep</b>											
<b>LCS (B208293-BS1)</b>											
						Prepared & Analyzed: 08/23/22					
Fluoride	2.01		mg/L	0.0800	0.300	2.00		101	90-110		
Sulfate	19.1		mg/L	1.40	5.00	20.0		95.4	90-110		
<b>LCS (B208293-BS2)</b>											
						Prepared & Analyzed: 08/24/22					
Fluoride	2.16		mg/L	0.0800	0.300	2.00		108	90-110		
Sulfate	20.6		mg/L	1.40	5.00	20.0		103	90-110		
<b>Duplicate (B208293-DUP1)</b>											
				<b>Source: S208114-05</b>		Prepared & Analyzed: 08/24/22					
Fluoride	0.410		mg/L	0.0800	0.300		0.405			1.23	20
Sulfate	1.40	U	mg/L	1.40	5.00		U				20
<b>Duplicate (B208293-DUP2)</b>											
				<b>Source: S208120-02</b>		Prepared & Analyzed: 08/24/22					
Fluoride	0.464	J-3	mg/L	0.0800	0.300		0.479			3.18	20
Sulfate	22.4	J-3	mg/L	1.40	5.00		22.9			2.48	20
<b>Duplicate (B208293-DUP3)</b>											
				<b>Source: S208120-07</b>		Prepared & Analyzed: 08/24/22					
Sulfate	28.4		mg/L	1.40	5.00		28.7			1.15	20
Fluoride	0.471		mg/L	0.0800	0.300		0.475			0.846	20
<b>Matrix Spike (B208293-MS1)</b>											
				<b>Source: S208114-05</b>		Prepared & Analyzed: 08/24/22					
Fluoride	2.39		mg/L	0.0800	0.300	2.00	0.405	99.3	90-110		
Sulfate	18.5		mg/L	1.40	5.00	20.0	U	92.5	90-110		
<b>Matrix Spike (B208293-MS2)</b>											
				<b>Source: S208120-02</b>		Prepared & Analyzed: 08/24/22					
Fluoride	2.23	J-3	mg/L	0.0800	0.300	2.00	0.479	87.5	90-110		
Sulfate	37.2	J-3	mg/L	1.40	5.00	20.0	22.9	71.4	90-110		
<b>Matrix Spike (B208293-MS3)</b>											
				<b>Source: S208120-07</b>		Prepared & Analyzed: 08/24/22					
Fluoride	2.65		mg/L	0.0800	0.300	2.00	0.475	109	90-110		
Sulfate	46.8		mg/L	1.40	5.00	20.0	28.7	90.3	90-110		



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#### Wet Chemistry - Quality Control

Analyte	Result	Qualifiers	Units	MDL	PQL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	
<b>Batch B208293 - Anion Prep</b>												
<b>Reference (B208293-SRM1)</b>				Prepared & Analyzed: 08/23/22								
Sulfate	99.8		mg/L	1.40	5.00	100		99.8	90-110			
Fluoride	10.3		mg/L	0.0800	0.300	10.0		103	90-110			
<b>Batch B208338 - DEFAULT PREP Wet Chem</b>												
<b>Blank (B208338-BLK1)</b>				Prepared: 08/12/22 Analyzed: 08/26/22								
Chlorophyll a - free of pheophytin	0.07	U	ug/L	0.07	0.28							
<b>LCS (B208338-BS1)</b>				Prepared: 08/25/22 Analyzed: 08/26/22								
Chlorophyll a - free of pheophytin	61.2		ug/L	0.07	0.28	58.7		104	90-110			
<b>Duplicate (B208338-DUP1)</b>				<b>Source: S208025-01</b>				Prepared: 08/03/22 Analyzed: 08/26/22				
Chlorophyll a - free of pheophytin	1.10		ug/L	0.07	0.28		1.11			0.905	30	



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#### Metals - Quality Control

Analyte	Result	Qualifiers	Units	MDL	PQL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch B208376 - EPA 200.7</b>											
<b>Blank (B208376-BLK1)</b> Prepared: 08/29/22 Analyzed: 08/30/22											
Arsenic	0.00332	I	mg/L	0.00300	0.0120						
<b>Blank (B208376-BLK2)</b> Prepared: 08/29/22 Analyzed: 08/30/22											
Arsenic	0.00450	I	mg/L	0.00300	0.0120						
<b>LCS (B208376-BS1)</b> Prepared: 08/29/22 Analyzed: 08/30/22											
Arsenic	0.325		mg/L	0.00300	0.0120	0.320		102	90-110		
<b>LCS (B208376-BS2)</b> Prepared: 08/29/22 Analyzed: 08/30/22											
Arsenic	0.339		mg/L	0.00300	0.0120	0.320		106	90-110		
<b>Matrix Spike (B208376-MS1)</b> Source: S208136-01 Prepared: 08/29/22 Analyzed: 08/30/22											
Arsenic	0.164		mg/L	0.00300	0.0120	0.160	0.00360	100	70-130		
<b>Matrix Spike (B208376-MS2)</b> Source: S208145-02 Prepared: 08/29/22 Analyzed: 08/30/22											
Arsenic	0.169		mg/L	0.00300	0.0120	0.160	U	106	70-130		
<b>Matrix Spike (B208376-MS3)</b> Source: S208148-01 Prepared: 08/29/22 Analyzed: 08/30/22											
Arsenic	0.167		mg/L	0.00300	0.0120	0.160	U	104	70-130		
<b>Matrix Spike (B208376-MS4)</b> Source: S208148-03 Prepared: 08/29/22 Analyzed: 08/30/22											
Arsenic	0.161		mg/L	0.00300	0.0120	0.160	0.00316	98.3	70-130		
<b>Matrix Spike Dup (B208376-MSD1)</b> Source: S208136-01 Prepared: 08/29/22 Analyzed: 08/30/22											
Arsenic	0.163		mg/L	0.00300	0.0120	0.160	0.00360	99.7	70-130	0.413	20
<b>Matrix Spike Dup (B208376-MSD2)</b> Source: S208145-02 Prepared: 08/29/22 Analyzed: 08/30/22											
Arsenic	0.168		mg/L	0.00300	0.0120	0.160	U	105	70-130	1.02	20





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<b>Batch B208376 - EPA 200.7</b>											
<b>Matrix Spike Dup (B208376-MSD3)</b>			<b>Source: S208148-01</b>		Prepared: 08/29/22 Analyzed: 08/30/22						
Arsenic	0.163		mg/L	0.00300	0.0120	0.160	U	102	70-130	2.03	20
<b>Matrix Spike Dup (B208376-MSD4)</b>			<b>Source: S208148-03</b>		Prepared: 08/29/22 Analyzed: 08/30/22						
Arsenic	0.161		mg/L	0.00300	0.0120	0.160	0.00316	98.7	70-130	0.378	20
<b>Reference (B208376-SRM1)</b>			Prepared: 08/29/22 Analyzed: 08/30/22								
Arsenic	0.324		mg/L	0.00300	0.0120	0.320		101	0-200		



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*Courtney King*

09/13/2022

Courtney King For Joshua Lipham / Technical Director

Date

### DATA QUALIFIERS THAT MAY APPLY:

- U = Not detected at or above the adjusted reporting limit
- I = The value is between the MDL and the PQL
- V = The analyte was detected in both the sample and the associated method blank
- J-3 = A sample matrix interference is suspected. Does not interfere with data usability.
- J-2 = The reported value failed to meet the established quality control criteria for either precision or accuracy. The data usability is not effected.

### NOTES:

- MDL = Method Detection Limit
- PQL = Practical Quantification Limit
- %REC = Percent Recovery
- RPD = Relative Percent Difference

For questions and comments regarding these results, please contact Joshua Lipham @ (863) 428-2732 (email: [Joshua.Lipham@mosaicco.com](mailto:Joshua.Lipham@mosaicco.com)).  
*Results relate only to the samples.*

Mosaic  
Minerals Environmental  
13830 Circa Crossing Drive  
Lithia, FL 33547

Date: 8/12/2022  
COC #: \_\_\_\_\_

S208117

Mosaic Environmental Lab  
7450 C.R. 630  
Mulberry, FL. 33860  
(863) 428 - 2761

Samples For: Compliance: \_\_\_\_\_  
Non-Compliance: \_\_\_\_\_  
Revised Date: 08/11/2022

Owner: Mike Mooneyham

Sampled By (Print):		Anthony Annibali												
Sampler Signature:		Anty Annibali												
Report to:						Project Name:								
						Wingate D-004 - DeSoto County Split Sample								
						C d A B F F G								
Date:	Time:	LAB ID #	SOURCE ID #	Sample ID	Type	Unpreserved 950ml: TSS,FSS	Unpreserved 250 ml: F, SO4	H2SO4 500 ml: Total P, Total N	Unpreserved 500 ml Amber: Chloro-a	H2SO4 950ml Glass Amber: Oil and Grease	HNO3 250 ml: As	HNO3 1/2 gal: GA, Ra226/228		
8/12/22	10:35	-01	019004	Wingate D-004	G	1	1	1	1	1	1	1		

Items:	Relinquished By:	Accepted By:	Date / Time:
7	Anthony Annibali	Ruby Coppens	8/12/22 @ 11:55

\_\_\_\_\_



TEMP 78.8  
THERMOMETER ID  
2011207  
PHX2 INIT. hu  
PH PAPER ID  
0051201

Please reference the electronic copy of this document on the company intranet to ensure this printed copy is the most recent version.

SURFA **Mosaic** DATA SHEET



Project: Wingate D 004- DeSoto County Split Sample

Anthony Annibali

8/12/2022

Source ID	Location	TYPE	TIME	FDEP-FT-1100	FDEP-FT-1200	FDEP-FT-1400	FDEP-FT-1600	FDEP-FT-1500	DO Sat	SAMPLE DEPTH	FLOW	STAFF GAUGE	WATER ELEVATION	COLOR
				PH	COND	TEMP	Turbidity	DO						
		Grab/Comp.		6.0< PH <8.5 S.U.	<1275 µS	°C	<29 NTU's	>5.0 mg/L	>38 %	Feet	MGD	Feet	MSL	
019004	Wingate D-004	Grab	10:35	7.28	596	30.3	2.40	5.26	69.3	TOWC	22.99	0.72		Clear

Source ID	Location	Width (ft)	x Depth (ft)	x Velocity (ft/s)	= CFS	x 0.64632 = MGD

Sampling Sequence: VOC, Organics, Metals, Microbio, Inorganics/Physical, Rad

BEGIN TIME 10:35 END TIME 11:03

FIELD CONDITIONS FOR SAMPLING DATE : CLOUD COVER: Clear Scattered / Broken / Overcast  
 AMBIENT TEMP. (°C) start: 30 end: 30

WIND DIRECTION: N / NE / E / SE / S / SW / W / NW / Variable / Calm  
 VISIBILITY start: Clear end: Clear

COMMENTS:



# Florida Radiochemistry Services, Inc.

Contact: Michael J. Naumann

5456 Hoffner Ave., Suite 201 Orlando, FL 32812

Phone: (407) 382-7733 Fax: (407)382-7744

Certification I. D. # E83033

Work Order #: 2208139

Report Date: 08/24/22

Report to:

Mosaic Fertilizer, LLC.

13830 Circe Crossing Drive

Lithia, FL 33547

Attention: Joshua Lipham / Adriana Rivers

I do hereby affirm that this record contains no willful misrepresentations and that this information given by me is true to the best of my knowledge and belief. I further certify that the methods and quality control measures used to produce these laboratory results were implemented in accordance with the requirements of this laboratory's certification and TNI Standards. The test results in this report relate only to the samples received.

Signed

Michael J. Naumann – President  
Shawn M. Naumann – Laboratory Manager

Date

8-24-22



Florida Radiochemistry Services, Inc.

Sample Login

<b>Client:</b>	<b>The Mosaic Company</b>	<b>Date / Time Received</b>	<b>Work order #</b>
		08/16/22 11:05	2208139
<b>Client Contact:</b>	<b>Joshua Lipham/Adriana Rivers</b>		
<b>Project I.D.</b>	<b>Wingate Outfalls - D-004 Monthly</b>		
<b>Lab Sample I.D.</b>	<b>Client Sample I.D.</b>	<b>Sample Date/Time</b>	<b>Analysis Requested</b>
2208139-01	S208117-01 MWG-D-004	08/12/22 10:35	Ga, Ra226, Ra228 Combined Ra226 + Ra228

Analysis Results

<b>Gross Alpha</b>	<b>3.6</b>	<b>Combined</b>	
<b>Error +/-</b>	<b>2.0</b>	<b>Ra226 + Ra228</b>	<b>1.1</b>
<b>MDL</b>	<b>1.9</b>	<b>Error +/-</b>	<b>0.6</b>
<b>EPA Method</b>	<b>900.0</b>	<b>MDL</b>	<b>0.8</b>
<b>Prep Date</b>	<b>08/22/22</b>		
<b>Prep Time</b>	<b>09:05</b>		
<b>Analysis Date</b>	<b>08/23/22</b>		
<b>Analysis Time</b>	<b>09:36</b>		
<b>Analyst</b>	<b>MJN</b>		
<b>Radium 226</b>	<b>0.7</b>	<b>Radium 228</b>	<b>0.8U</b>
<b>Error +/-</b>	<b>0.2</b>	<b>Error +/-</b>	<b>0.6</b>
<b>MDL</b>	<b>0.1</b>	<b>MDL</b>	<b>0.8</b>
<b>EPA Method</b>	<b>903.0</b>	<b>EPA Method</b>	<b>Ra-05</b>
<b>Prep Date</b>	<b>08/17/22</b>	<b>Prep Date</b>	<b>08/17/22</b>
<b>Prep Time</b>	<b>08:35</b>	<b>Prep Time</b>	<b>08:35</b>
<b>Analysis Date</b>	<b>08/24/22</b>	<b>Analysis Date</b>	<b>08/23/22</b>
<b>Analysis Time</b>	<b>09:39</b>	<b>Analysis Time</b>	<b>10:18</b>
<b>Analyst</b>	<b>MJN</b>	<b>Analyst</b>	<b>SN</b>
<b>Units</b>	<b>pCi/l</b>	<b>Units</b>	<b>pCi/l</b>



QA Page

Analyte	Sample #	Date Analyzed	Sample Result	Amount Spiked	Spike Result	Spike /Dup Result	Spike % Rec.	Spike Dup % Rpd
Gross Alpha	2208140-02	08/23/22	4.1	10.0	12.7	12.4	86	2.4
Radium 226	2208117-05	08/24/22	0.8	4.42	4.7	4.8	88	2.1
Radium 228	2208117-05	08/23/22	0.6	3.22	3.9	3.5	102	10.8

	Quality Control	Limits
	% RPD	% Rec.
Gross Alpha	20.0	70-130
Radium 226	20.0	80-120
Radium 228	20.0	70-130

**SUBCONTRACT ORDER**  
Mosaic Fertilizer, LLC Environmental Laboratory



**Wingate**

Outfalls - D-004 Monthly

**S208117**

**SENDING LABORATORY:**

Mosaic Fertilizer, LLC Environmental Laboratory  
7450 CR 630 Building 1  
Mulberry, FL 33865  
Phone: 863-428-2764  
Project Manager: Joshua Lipham

**RECEIVING LABORATORY:**

Florida Radiochemistry Service  
5456 Hoffner Avenue #201  
Orlando, FL 32812-2517  
Phone : (407) 382-7733

Sub Lab ID

**Sample ID: S208117-01    019004**

MWG-D-004

Water

Sampled: 08/12/22 10:35



Gross-Alpha

Radium 226

Radium 228

Containers:

Released By

*J. Coppone*

Released By

*M. Mann*

Received By

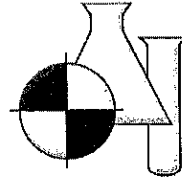
*8/16/22 @ 11:05*

Date

Date



# BENCHMARK



NELAP Certification #E84167

EnviroAnalytical, Inc.

## ANALYTICAL TEST REPORT THESE RESULTS MEET NELAP STANDARDS

Submission Number : 22080798

Mosaic Fertilizer, L L C  
13830 Circa Crossing Drive  
Lithia, FL 33547

Project Name : WINGATE WGC D-004 MONTHLY

Project ID : S208117

Date Received : 08/12/2022

Time Received : 14:12

Joshua Lipham

Submission Number:	22080798	Sample Point:	019004
Sample Number:	001	Sample ID:	S208117-01
Sample Date:	08/12/2022	Sample Description:	MWG-D-004
Sample Time:	10:35	Sample Method:	Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
OIL & GREASE	1.37 U	MG/L	1.37	5.48	1664A	08/22/2022 10:52	PN

*Haley Richardson*

08/30/2022

Dale D. Dixon / Laboratory Director

Date

Haley Richardson / QA Officer

Tülay Tanrisever / QC Officer

### DATA QUALIFIERS THAT MAY APPLY:

- A = Value reported is an average of two or more determinations.
- B = Results based upon colony counts outside the ideal range.
- H = Value based on field kit determination. Results may not be accurate.
- I = Reported value is between the laboratory MDL and the PQL.
- J1 = Estimated value. Surrogate recovery limits exceeded.
- J2 = Estimated value. No quality control criteria exists for component.
- J3 = Estimated value. Quality control criteria for precision or accuracy not met.
- J4 = Estimated value. Sample matrix interference suspected.
- J5 = Estimated value. Data questionable due to improper lab or field protocols.
- K = Off-scale low. Value is known to be < the value reported.
- L = Off-scale high. Value is known to be > the value reported.
- N = Presumptive evidence of presence of material.
- O = Sampled, but analysis lost or not performed.

Q = Sample held beyond accepted hold time.

T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.

U = Analyte analyzed but not detected at the value indicated.

V = Analyte detected in sample and method blank. Results for this analyte in associated samples may be biased high. Standard, Duplicate and Spike values are within control limits. Reported data are usable.

Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.

Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

I = Data deviate from historically established concentration ranges.

? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the presence or absence of the analyte cannot be determined from the data.

\* = Not reported due to interference.

Oil & Grease - If client does not send sufficient sample quantity for spike evaluation surface water samples are supplied by the laboratory.

### COMMENTS:

### NOTES:

- PQL = 4xMDL.
- MBAS calculated as LAS; molecular weight = 340.
- ND = Not detected at or above the adjusted reporting limit.
- X = Value exceeds MCL.

The associated laboratory control sample exhibited high bias; since the result is ND, there is no impact.

For questions and comments regarding these results, please contact us at (941) 723-9986.

Results relate only to the samples.

SUBCONTRACT ORDER  
Mosaic Fertilizer, LLC Environmental Laboratory



Wingate  
Outfalls - D-004 Monthly

S208117

SENDING LABORATORY:

Mosaic Fertilizer, LLC Environmental Laboratory  
7450 CR 630 Building 1  
Mulberry, FL 33865  
Phone: 863-428-2764  
Project Manager: Joshua Lipham

RECEIVING LABORATORY:

Benchmark Analytical  
1711 12th St. E.  
Palmetto, FL 34221  
Phone :(941) 723-9986

Sub Lab ID

Sample ID: S208117-01 019004

MWG-D-004

Water Sampled: 08/12/22 10:35

22080798-1

Oil & Grease, EPA 1664A

Sample Receipt Temp. 0.4 °C

Thermometer ID: 258

pH < 2 0 Init. AM

Containers:

Kcoppom

Released By

8/12/22 @

Date

Lisa Timmer

Released By

Kate Mclover

Received By

8-12-22

Date

142  
1302/AM



*EnviroAnalytical, Inc.*

NELAP Certification #E84167

Submission Number: 22080798

Project Name: WINGATE WGC D-004 MONTHLY

**QC REPORT**

SUBMISSION NUMBER	SAMPLE NUMBER	METHOD	ANALYTE	ANALYSIS DATE/TIME	QC FLAG	QC VALUE	SAMPLE RESULT	LR RESULT	LR %RSD	SPK RESULT	STD-SPK %REC
	1664A		OIL & GREASE	08/22/2022 10:52	MB	0.00	0.000				0.0
	1664A		OIL & GREASE	08/22/2022 10:52	SPK	40.00	0.100			37.100	92.5
	1664A		OIL & GREASE	08/22/2022 10:52	STD	40.00	36.200				90.5

Comments:

QC FLAGS: MB or BLK = METHOD BLANK LR = LAB REPLICATE MSD = MATRIX SPIKE DUPLICATE STD or LCS = STANDARD SPK or MS = MATRIX SPIKE