FINAL

ANALYTICAL REPORT

ETL PROJECT ID: 17-0305

2/8/2017 - Revision 0

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CLIENT PROJECT NAME: RAY CITY

CLIENT PROJECT ID:

FACILITY ID:

Enclosed are the analytical results for sample(s) received by Environmental Testing Laboratories on January 25, 2017. Results reported herein are reported on an as received basis and conform to current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Sample analyses performed by Environmental Testing Laboratories, Inc. (ETL) unless otherwise noted. ETL is accredited through NELAC and the Florida Department of Health, Certification #E87684. Scope of analyses: RCRA/CERCLA Metals, General Chemistry, Extractable Organics, and Volatile Organics. Effective Dates: February 14, 2002 through June 30, 2017.

This report shall not be reproduced, except in full, without the written consent of Environmental Testing Laboratories, Inc. This report has been signed and authorized by the signatory using an electronic signature and is intended to be the legally binding equivalent of a traditionally handwritten signature.

Authorized for release by:



ENVIRONMENTAL TESTING LABORATORIES INC

412 W. Walcott Street | Thomasville, GA 31792 | Phone: (229)-228-2592 | Fax: (229)-228-2594



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Laboratory Qualifiers

- ! Data deviate from historically established concentration ranges.
- # Surrogate compound inadvertently omitted.
- \$ Due to dilution, surrogate compound was not detected.
- * Not reported due to interference
- ? Data are rejected as should not be used.
- A Value reported is the arithmetic mean (average) of two or more determinations.
- B Results based upon colony counts outside the acceptable range.
- **D** Measurement made in the field.
- **E** Extra samples were taken at composite stations.
- F When reporting species, F indicates the female sex.
- H Value based on fied 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.
- **K** Off-scale low. Actual value is known to be less than the value given.
- L Off-scale high. Actual value is known to be greater than the value given.
- **M** Presence of material is verified but not quantified; the actual value is less than the value given.
- N Presumptive evidence of presence of material.
- O Sampled, but analysis lost or not performed.
- **Q** Sample held beyond the accepted holding time.
- R Significant rain in the past 48 hours.
- S1 Surrogate recovery reported is outside of laboratory established QA/QC Limits
- S2 Analyte recovery reported is outside of laboratory established QA/QC Limits
- S3 Analyte precision reported is outside of laboratory established QA/QC Limits
- T Value reported is less than the laboratory method detection limit.
- **U** Compound was analyzed for but not detected.
- V Indicates that the analyte was detected in both the sample and the associated method blank.
- Y Laboratory analysis was from an improperly preserved sample. Data may not be accurate.
- Z Too many colonies were present; numeric value represents the filtration volume.



Project Narrative



Environmental Testing Laboratories, Inc. is accredited through NELAC and the Florida Department of Health.



Solid samples are reported on a dry weight basis unless otherwise noted.



Please refer to Section 4.0 of the ETL Quality Assurance Manual for a measure of uncertainty.



All analyses are performed using EPA or FL-DEP methods and certified to meet NELAC requirements, except where noted.



Analytical Method Summary

E87684 Environmental Testing Laboratories Inc.

412 W. Walcott Street, Thomasville, GA 31792

(229) 228-2592

EPA 1664 A

EPA 350.1

EPA 351.2

EPA 353.2 (Nitrate-Nitrite (N))

EPA 365.1 (Phosphorus -Total)

SM18 2540 C

Total Nitrogen



Sample Summary

Laboratory Sample ID	Client Sample ID	Matrix	End Date / Time Sampled	Grab / Composite	Percent Moisture
208318	EFF	AQUEOUS-Wastewater	1/25/2017 8:15	G	

Executive Summary

Analyte	Analytical Method	Result	Units	Qualifiers	Result Comments
EFF (208318)					
Nitrogen- Total Kjeldahl	EPA 351.2	7.0	mg/L		
Nitrogen- Total	Total Nitrogen	7.9	mg/L		
Nitrate-Nitrite (N)	EPA 353.2 (Nitrate-Nitrite (N))	0.88	mg/L		
Phosphorus- Total	EPA 365.1 (Phosphorus -Total)	2.0	mg/L		
Ammonia (N)	EPA 350.1	5.4	mg/L		
Residues- Filterable (TDS)	SM18 2540 C	170	mg/L		



Analytical Data

Client Sample ID: EFF Laboratory Sample ID: 208318

Sample Location: Matrix: AQUEOUS-Wastewater

Date Collected: 01/25/2017 08:15 AM Percent Moisture:

General Chemistry

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Ammonia (N)	2.0	5.4		mg/L	0.36	0.60	2/6/2017 4:52:00 PM
Nitrate-Nitrite (N)	1.0	0.88		mg/L	0.042	0.050	2/6/2017 11:14:00 AM
Nitrogen- Total	1.0	7.9		mg/L	0.10	0.20	2/7/2017 11:15:00 PM
Nitrogen- Total Kjeldahl	1.0	7.0		mg/L	0.24	0.50	2/7/2017 11:15:00 PM
Oil & Grease	1.0	1.4	U	mg/L	1.4	2.0	1/31/2017 9:00:00 AM
Phosphorus- Total	1.0	2.0		mg/L	0.023	0.050	1/30/2017 10:34:00 AM
Residues- Filterable (TDS)	1.0	170		mg/L	13	20	1/24/2017 10:00:00 AM

PQL: Practical Quantitation Limit MDL: Method Detection Limit DF: Dilution Factor



Data Chronicle

Client Sample ID: EFF Laboratory Sample ID: 208318

Sample Location: Matrix: AQUEOUS-Wastewater

Date Collected: 01/25/2017 08:15 AM Percent Moisture:

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 1664 A	1.0	OGA013117	1/31/2017 9:00:00 AM	1/31/2017 9:00:00 AM	PE	E87684
TOT	RES	EPA 350.1	2.0	020617ANH3	2/2/2017 10:49:00 AM	2/6/2017 4:52:00 PM	GG	E87684
TOT	RES	EPA 351.2	1.0	020717BTKN	1/31/2017 1:59:00 PM	2/7/2017 11:15:00 PM	GG	E87684
TOT	RES	EPA 353.2 (Nitrate-Nitrite (N))	1.0	020617ANO23	2/6/2017 11:14:00 AM	2/6/2017 11:14:00 AM	GG	E87684
TOT	RES	EPA 365.1 (Phosphorus -Total)	1.0	013017ATP		1/30/2017 10:34:00 AM	GG	E87684
TOT	RES	SM18 2540 C	1.0	TDS012417	1/24/2017 10:00:00 AM	1/24/2017 10:00:00 AM	JE	E87684
ТОТ	RES	Total Nitrogen	1.0	TN020717	2/7/2017 11:15:00 PM	2/7/2017 11:15:00 PM	CALC	E87684



	Batch ID: 0130 Batch ID: M013			Analysis	Method: EPA	365.1 (Pho	osphorus -Total)		Prepar Prepar		ype: 365.1 Pate:		
	Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limi
QA/QC Type:	MB	Lab Sample ID:	013017ATPMB		Client	Sample ID:	013017ATPMB		Date	e Analy	zed: 1/30/2017	9:52:00 AM	
_	Phosphorus-	Total 0.023	0.050	0.023	U	mg/L							
QA/QC Type:	LCS	Lab Sample ID:	013017ATPLCS		Client	Sample ID:	013017ATPLCS		Date	e Analy	zed: 1/30/2017	9:44:00 AM	
_	Phosphorus-	Total 0.023	0.050	2.34		mg/L	2.35	99.6	90	-	110		
QA/QC Type:	LCSD	Lab Sample ID:	013017ATPLCSD		Client	Sample ID:	013017ATPLCSD		Date	e Analy	zed: 1/30/2017	9:45:00 AM	
_	Phosphorus-	Total 0.023	0.050	2.36		mg/L	2.35	100	90	-	110	0.85	20
QA/QC Type:	MS	Lab Sample ID:	013017ATPMS		Client	Sample ID:	208347MS		Date	e Analy	zed: 1/30/2017	10:01:00 AN	Л
_	Phosphorus-	Total 0.023	0.050	1.10		mg/L	1.00	102	90	-	110		
QA/QC Type:	MSD	Lab Sample ID:	013017ATPMSD		Client	Sample ID:	208347MSD		Date	e Analy	zed: 1/30/2017	10:03:00 AM	Л
	Phosphorus-	Total 0.023	0.050	1.10		mg/L	1.00	102	90	-	110	0	20
QA/QC Type:	DUP	Lab Sample ID:	013017ATPDUP		Client	Sample ID:	208347DUP		Date	e Analy	zed: 1/30/2017	10:00:00 AM	Л
_	Phosphorus-	Total 0.023	0.050	0.083		mg/L						2.4	20
Comments:													
•	Batch ID: 0206			Analysis	Method: EPA	350.1			Prepar Prepar		ype: Distillation	า	
Welliod	i Batch ID. WOZC	JOT ANTIS							% REC Low		% REC High		
	Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	Limit	-	Limit	%RPD	% RPD Limi
QA/QC Type:	MB	Lab Sample ID:	020617ANH3MB		Client	Sample ID:	020617ANH3MB		Date	e Analy	zed: 2/6/2017 3	:49:00 PM	
	Ammoni	a (N) 0.18	0.30	0.18	U	mg/L							
QA/QC Type:	LCS	Lab Sample ID:	020617ANH3LCS		Client	Sample ID:	020617ANH3LCS		Date	e Analy	zed: 2/6/2017 3	:42:00 PM	
	Ammoni	a (N) 0.18	0.30	3.43		mg/L	3.30	104	90	-	110		
QA/QC Type:	LCSD	Lab Sample ID:	020617ANH3LCSD		Client	Sample ID:	020617ANH3LCSD		Date	e Analy	zed: 2/6/2017 3	:43:00 PM	
	Ammoni	a (N) 0.18	0.30	3.60		mg/L	3.30	109	90	-	110	4.8	20



Preparation Batch ID: 020617ANH3 Analysis Method: EPA 350.1 Preparation Type: Distillation Method Batch ID: M020617ANH3 Preparation Date: % REC High % REC Low Analyte MDI PQI Result Qual Units Spike Amount % RFC I imit Limit %RPD % RPD Limit QA/QC Type: MS Client Sample ID: 208341MS Lab Sample ID: 020617ANH3MS Date Analyzed: 2/6/2017 3:58:00 PM 0.18 0.30 2.64 104 110 Ammonia (N) mg/L 1.00 QA/QC Type: MSD Lab Sample ID: 020617ANH3MSD Client Sample ID: 208341MSD Date Analyzed: 2/6/2017 4:00:00 PM 0.30 2.65 105 90 110 20 Ammonia (N) 0.18 1.00 0.38 ma/L QA/QC Type: DUP Lab Sample ID: 020617ANH3DUP Client Sample ID: 208341DUP Date Analyzed: 2/6/2017 3:57:00 PM Ammonia (N) 0.18 0.30 1.6 mg/L 0 20 **Comments:** Preparation Batch ID: 020617ANO23 Analysis Method: EPA 353.2 (Nitrate-Nitrite (N)) Preparation Type: Gen Prep Method Batch ID: M020617ANO23 Preparation Date: 2/6/2017 10:55:00 AM % REC Low % REC High MDL PQL % REC %RPD % RPD Limit Analyte Result Qual Units Spike Amount Limit Limit QA/QC Type: MB Lab Sample ID: 020617ANO23MB Client Sample ID: 020617ANO23MB Date Analyzed: 2/6/2017 10:55:00 AM Nitrate-Nitrite (N) 0.042 0.050 0.042 mg/L 0.042 0.050 0.042 U mg/L Nitrate (N) QA/QC Type: LCS Lab Sample ID: 020617ANO23LCS Client Sample ID: 020617ANO23LCS Date Analyzed: 2/6/2017 10:49:00 AM Nitrate-Nitrite (N) 0.042 0.050 2.04 ma/L 2.04 100 110 Nitrate (N) 0.042 0.050 2 04 ma/L 2 04 100 110 QA/QC Type: LCSD Lab Sample ID: 020617ANO23LCSD Client Sample ID: 020617ANO23LCSD Date Analyzed: 2/6/2017 10:50:00 AM Nitrate (N) 0.042 2.4 20 0.050 2.09 mg/L 2.04 102 90 110 2.4 20 Nitrate-Nitrite (N) 0.042 0.050 2.09 mg/L 2.04 102 110 QA/QC Type: MS Lab Sample ID: 020617ANO23MS Client Sample ID: 208244MS Date Analyzed: 2/6/2017 11:02:00 AM Nitrate-Nitrite (N) 0.042 0.050 99.0 110 1.86 mg/L 1.00 QA/QC Type: MSD Lab Sample ID: 020617ANO23MSD Client Sample ID: 208244MSD Date Analyzed: 2/6/2017 11:03:00 AM Nitrate-Nitrite (N) 0.042 0.050 1.92 mg/L 1.00 105 110 32 20



Preparation Batch ID: 02 Method Batch ID: MC			Analysis	Method: EPA	353.2 (Nitra	ate-Nitrite (N))		•		Type: Gen Prep Date: 2/6/2017		
Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: DUP	Lab Sample ID:	020617ANO23DUP		Client S	sample ID:	208244DUP		Date	Analy	/zed: 2/6/2017 1	1:00:00 AM	
Nitrate-Ni Nit	itrite (N) 0.042 rrate (N) 0.042	0.050 0.050	0.86 0.86		mg/L mg/L						1.2	20 20
Comments:												
Preparation Batch ID: 02 Method Batch ID: MC			Analysis	Method: EPA	351.2			Prepara Prepara		Гуре: 351.2 Date:		
Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID:	020717BTKNMB		Client S	sample ID:	020717BTKNMB		Date	Analy	/zed: 2/7/2017 1	0:58:00 PM	
Nitrogen- Total I	Kjeldahl 0.24	0.50	0.24	U	mg/L							
QA/QC Type: LCS	Lab Sample ID:	020717BTKNLCS		Client S	ample ID:	020717BTKNLCS		Date	Analy	/zed: 2/7/2017 1	0:51:00 PM	
Nitrogen- Total I	Kjeldahl 0.24	0.50	6.63		mg/L	7.15	92.7	90	-	110		
QA/QC Type: LCSD	Lab Sample ID:	020717BTKNLCSD		Client S	ample ID:	020717BTKNLCSD		Date	Analy	/zed: 2/7/2017 1	0:52:00 PM	
Nitrogen- Total I	Kjeldahl 0.24	0.50	6.68		mg/L	7.15	93.4	90	-	110	0.75	20
QA/QC Type: MS	Lab Sample ID:	020717BTKNMS		Client S	ample ID:	208314MS		Date	Analy	/zed: 2/7/2017 1	1:06:00 PM	
Nitrogen- Total I	Kjeldahl 0.24	0.50	5.03		mg/L	5.00	92.2	90	-	110		
QA/QC Type: MSD	Lab Sample ID:	020717BTKNMSD		Client S	ample ID:	208314MSD		Date	Analy	/zed: 2/7/2017 1	1:07:00 PM	
Nitrogen- Total I	Kjeldahl 0.24	0.50	5.03		mg/L	5.00	92.2	90	-	110	0	20
QA/QC Type: DUP	Lab Sample ID:	020717BTKNDUP		Client S	ample ID:	208314DUP		Date	Analy	/zed: 2/7/2017 1	1:04:00 PM	
Nitrogen- Total I	Kjeldahl 0.24	0.50	0.42	I	mg/L						0	20

Comments:



Preparation Batch ID: OGA013117 Analysis Method: EPA 1664 A Preparation Type: No Prep Method Batch ID: MOGA013117 Preparation Date: 1/31/2017 9:00:00 AM % REC High % REC Low Analyte MDI PQI Result Qual Units Spike Amount % RFC I imit Limit %RPD % RPD Limit QA/QC Type: MB Client Sample ID: OGA013117MB Lab Sample ID: OGA013117MB Date Analyzed: 1/31/2017 9:00:00 AM Oil & Grease 1.4 2.0 1.4 mg/L QA/QC Type: LCS Lab Sample ID: OGA013117LCS Client Sample ID: OGA013117LCS Date Analyzed: 1/31/2017 9:00:00 AM 36.9 92.2 Oil & Grease 2.0 40.0 78 114 ma/L QA/QC Type: LCSD Lab Sample ID: OGA013117LCSD Client Sample ID: OGA013117LCSD Date Analyzed: 1/31/2017 9:00:00 AM Oil & Grease 2.0 33.5 mg/L 40.0 83.8 114 9.7 18 QA/QC Type: MS Lab Sample ID: OGA013117MS Client Sample ID: 208374MS Date Analyzed: 1/31/2017 9:00:00 AM Oil & Grease 1.4 2.0 32.4 mg/L 40.0 81.0 114 QA/QC Type: DUP Lab Sample ID: OGA013117DUP Client Sample ID: 208454DUP Date Analyzed: 1/31/2017 9:00:00 AM 2.0 6.1 7.9 18 Oil & Grease mg/L **Comments:** Preparation Batch ID: TDS012417 Analysis Method: SM18 2540 C Preparation Type: No Prep Method Batch ID: MTDS012417 Preparation Date: 1/24/2017 10:00:00 AM % REC Low % REC High POL % RPD Limit Analyte MDL Units Spike Amount % REC I imit I imit %RPD Result Qual QA/QC Type: MB Lab Sample ID: TDS012417MB Client Sample ID: TDS012417MB Date Analyzed: 1/24/2017 10:00:00 AM Residues- Filterable (TDS) 13 mg/L QA/QC Type: LCS Lab Sample ID: TDS012417LCS Client Sample ID: TDS012417LCS Date Analyzed: 1/24/2017 10:00:00 AM Residues- Filterable (TDS) 500 120 494 mg/L 98.8 QA/QC Type: LCSD Client Sample ID: TDS012417LCSD Lab Sample ID: TDS012417LCSD Date Analyzed: 1/24/2017 10:00:00 AM Residues- Filterable (TDS) 20 487 500 97.4 120 1.4 20 mg/L QA/QC Type: DUP Lab Sample ID: TDS012417DUP Client Sample ID: 208005DUP Date Analyzed: 1/24/2017 10:00:00 AM Residues- Filterable (TDS) 430 mg/L 24 20



Comments:

Chain of Custody Record

Company:	South	10	2020	Ĵ (l M	nd	l aa	na s	Seni.	Env	/iron	ment sas	ai les			ratorie cott Stree			Page		of		
Address:	73x								37639		MENTAL TES	TRIG LARGI	ATOMES, Inc.			e, GA 317 92 (telep	792-4359 hone)			o E.R	4YCt	<u> </u>	
Telephone	Number:					Tolefax	Numi	oer;		www	eti-inc	.com				4 (telefa	XX)	Projec	t Number:			<i></i>	
Sampled b	y (Print Name(s		,	_		f							Analys	ps Req	uested			Projec	t Manager:				
	Joey	1	124	10	<u> </u>	/				B				予覧				Facilit	y ID Number	7.			
Sampler(s) Signature(s)	X	W)(l	24	les				Moraca		43		なななられ					REQU	ESTED	OUE DAT	-	
Item No.	Field ID No.			nple Tir		Grab Comp		Matrix (see Codes)	Number of Containers	=	F		7	£2	1				Remark	s	L	ab Number	
	EFF		Date 25	BI		En	Th)	WW	2	$\overline{\mathcal{C}}$				ANGELIN (P.							200	1318	
	FF		Z5	87	5	Ota	6	M]		V	V	V	V									
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	Shipment	Met	had			Total N	umber	of Containers	7.7									- -	reservatives ((see Code	6) (CE: \	Yes 🔾 N	
Out		Via				Item N			uished by / A	filiation	<u>i</u> 1	C	ate	71	me		Accepted	by / Affil	iation		Date	Time	****
Returned		Via	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					WI.	HALL	11	7	7-25	77	141	8								
Additional	Comments:							<i>y</i> - y -						<u> </u>							.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		•••••
														<u> </u>			S		<i>-</i>			***************************************	
									Temperature	(s) (*C)	Sa	mpling l	CIT NUM	Der 3		A Poceive	d in Lab	57 L	1 1	5/17	11115	
MATRIX	CODES.		= Air		(Z\M	<u> </u>		<u>ìu ()</u>	41 SE = Sedime	nt	\$O =	Soil	S	V = Sur	face Wa	ater	WW = W		er (O = Othe	(specify)	
1	VATIVE CODES		1 = Hyd	rochio				S = Sulfuric a		N = N					n Hydro		O	≂ Other	(specify)				
The second secon	VATIVE CODES		OIL VC				fethar	iol / Sodium	Bisulfate	MD	= Meth	anol / D	Water				ETL	PROJE	CT NO.	17-0	205 ₅₀	18	



Project Receipt Summary

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SOUTHLAND
COMPL
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Project Name: RAY CITY

Shipping and Receiving

HC689794
ਂ Yes
 Yes
⊛ Yes
⊕ Yes ○ No
A (
Yes ○ No
Yes
Yes
Cooler Temperatures: 4.9
Yes
Were cooler temperatues in compliance? (0.1-6.0C)
ਂ Yes
If present, were sample bottle custody seals intact
⊖Yes ⊝No
If present, were cooler custody seals intact?

I certify I have answered the questions contained herein to the best of my knowledge and have affixed labels with unique IDs onto each sample container received. I certify any discrepancies regarding the samples as received by the laboratory have been documented completely in the comments section of this form.

Dillan Gilliard



Project Receipt Summary

17-0305

	Proj	Project Sample Detail			
Lab Sample iD	Client Sample ID	Matrix	SPLP	TRPH MaVPH SPLP Speciation MaEPH	МаVРН МаЕРН
208318	EFF	AQUEOUS-Wastewater			
208318-E1 (NO2+NO3/TKN/TP/NH3)	STKN/TP/NH3)				
208318-E2 (Oil & Grease)	ise)				
208318-E3 (Oil & Grease)	ise)				
208318-E4 (TDS)					

Page 2 of 3



Project Receipt Summary

17-0305

Project Bottle Count Summary

Container Type	Preservative	Number of Containers
1-L Amber Glass HCL 2	HCL	2
HDPE Plastic	H2SO4	
HDPE Plastic	NONE	andh
Total 4	Total	4

Page 3 of 3