

DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF WATER RESOURCES William R. Snodgrass - Tennessee Tower

312 Rosa L. Parks Avenue, 11th Floor

Nashville, Tennessee 37243-1102

(615) 532-0625

NOTICE OF INTENT (NOI) for Land Application of Non-Exceptional Quality Biosolids

Gen Nan	erator he: Chickasaw Trails Wastewater Treatment Plant	Current NPDES No: MS0060046-001	Existing Tracking No:						
Own	er or Operator: (the person or legal entity which controls the site's operation	n) Marshall Htility Services							
	Name of Official Contact Person: (individual responsible for a site) Justin Hall	Title or Position: Executive	Director						
1	Mailing Address: 520 J.M. Ash Drive	^{City:} Holly Springs	State: MS	^{Zip:} 38635					
	Phone: ()662.252.3916	E-mail: rwrmts@yaho	o.com						
	Name of Local Contact Person: (if appropriate, write "same as #1") Robert Richmond	Title or Position: Project Manager							
2	Site Address: (this may or may not be the same as street address) 1019 Dogwood Road	Site City: Cayce	TN MS	^{Zip:} 38611					
	Phone: ()901.598.2806	E-mail: rwrmts@yahoo	o.com						
	Write in the box (to the right)	or circle the number (above) to indicate	where to send correspon	ndence:					
All	non-exceptional biosolids land application sites that have be nit will be covered under this permit upon receipt of the sign	en approved by the division prior ned certification statement, comp	to the effective da leted NOI and a co	te of this py of site					

_approval letter(s).	
A. OPERATIONAL INFORMATION: 30	
Estimated annual amount of biosolids generated (dry weight basis) (to	ns)
Estimated annual amount of biosolids to be land applied (dry weight basis) <u>30</u> (to	ons)
B. BIOSOLIDS TREATMENT PROCESS: Please provide a description of the biosolids treatment process used p	prior to
biosolids being land applied (use a separate sheet if necessary):	
Incoming sewage is screened and transferred to the sequential batch reactor (SBR) where the solids settle to the bottom. The set	tled
solids are transferred to an aerobic digester where the material digested. Effluent water is disinfected and discharged to a tributar	y of the
C. CHEMICAL ANALYSIS: Indicate which contaminant standard(s) the biosolids meet:	
Table 1 Ceiling Contaminant Concentrations: Table 3 Contaminant Concentrations:	i i
• Submit analytical results to demonstrate eligibility for and compliance with the quality criteria specified	in the
General Permit.	
• Submit PCB and TCLP analytical results that are less five years old.	
See attached analysis. The material is non-hazardous and is Table 3 Pollutant Concentration	
compliant.	
D DATHOCEN DEDUCTION LEVEL A CHIEVED: Indicate alternative used to achieve the pathogen reduction. For	r Class
A Alternatives 5 and 6: for Class B Alternatives 2 and 3 list the specific Process to Further Reduce Pathogens (PE	(RP) or
Process to Significantly Reduce Pathogens (PSRP)	Ki) 01
Class A: Alternative 1 Alternative 2 Alternative 3	
Alternative 4 Alternative 5 Alternative 6	
(List PFRP) (List Eq. PFRP)	
Class B: Alternative 1 Alternative 2 Alternative 3	
(List PSRP) (List Eq. PSRP)	
Provide a detailed description of the pathogen treatment process. Attach laboratory analytical and/or process mor	itoring
results, as appropriate, that demonstrate pathogen reduction is being achieved:	
The settled solids transferred from the sequential batch reactor are aerobically digested onsite	
resulting in a Class B biosolid as it relates to pathogen reduction.	

NOTICE OF INTENT (NOI) for Land Application of Non-Exceptional Quality Biosolids

Е.	VECTOR ATTR	RACTION RED	UCTION LEVEL ACHIEVED	: Indicate the option used	to achieve the ve	ector attraction						
	reduction.		ion 2 Ontion 3	Ontion 1								
	$\Box \text{ Option 1}$	□ Opt	$\begin{array}{cccc} 10n 2 & & \\ 1on 6 & & \\ \hline \end{array} \begin{array}{c} Option 3 \\ \hline \end{array}$	Option 4								
	If one of the ve	ector attraction r	eduction Options 1 - 5 is select	ted, do the biosolids m	eet Class A par	thogen reduction						
	requirements prior to or at the same time as meeting the vector attraction reduction requirements? \Box Yes \Box No											
Provide a detailed description of the vector attraction reduction treatment process. Attach laboratory analytical and/or process												
The	nontioning result	s, as appropriate,	rom the acquestial batch	reactor are corchie	veu.	onoito						
	Settled Solids	Inansieneu i	rom the sequential batch	IP on ottompt will	ally digested	onsile.						
AIIN	bugn not initia	illy lested for	volatile solids and/or SO	JR, an allempt will	Option 1 or	Ontion 4						
appi	ication to mee		on 1 or Option 4. If the m	aterial fails to meet	Option 1 or	Option 4,						
Ορι		umzea.										
-	X Q Q Q											
F.	If one of the vector	or attraction redu	ction Options 1 - 8 above was not	t performed, indicate how	the vector attrac	ction reduction						
	Option 9 (Su	bsurface Injection	on)	s. Option 10 (Incorporation	1)							
		J		The second se	,							
lf Opt	ion 1 or Option 4 fa	il, the material will	be land applied as a liquid and wil	I be incorporated within 6 I	nours in accordan	ce with Option 10.						
G.	SAMPLING PL	AN: Include a c	letailed copy of the biosolids sar	npling plan as specified i	n the instruction	s. The sampling						
	plan must addres	s sampling proto	cols for contaminants, pathogen	reduction, and vector att	raction reduction	n quality criteria.						
Due to	the small size of the plan	nt and resultant small a	mount of material generated, the biosolids wi	II be sampled on an event-timed b	asis and immediately p	prior to land application.						
			-									
H.	LAND APPLIC	ATION AREA	(s): Include a list of land appli	cation area(s) that will b	e used for dispo	osal of biosolids.						
	Attach a detailed	A rea (acres)	Application Rate (tons/acre) r	$\frac{1111}{2} \sec(1011) 5.2.1 (add add)$	Latitude	Longitude						
		mea (acres)	Application Rate (tons/acre) p	500 Section 5.2.2	(decimal)	(decimal)						
	TN-FA-1	~112.5	Bermuda Hay - application rate would be	~8 DryTon/Acre at ~3.5% solids	35.136145	-89.553261						
I.	CERTIFICATIO	ON: I certify, u	nder penalty of law, that contam	inant concentrations in t	he biosolids, pat	hogen reduction,						
	vector attraction i	reduction, and oth	her quality criteria of the biosolid	s stated in the regulations	s have been met of this document on	or, if appropriate,						
	were prepared ur	der my direction	n or supervision in accordance y	with a system designed t	o assure that an	alified personnel						
	properly gathered	d and evaluated	the information submitted. Bas	ed on my own knowled	ge as well as the	ne inquiry of the						
	person(s) who ma	anage the system	, or those directly responsible for	r gathering the informati	on, the informat	ion submitted, to						
	the best of my ki	nowledge and be	lief, is true, accurate and comple	te. I further acknowledg	e that the facilit	y or generator of						
	biosolids describe	ed above is eligib	ble for coverage under TDEC's G	eneral Permit for the Lar	nd Application of	f Biosolids. I am						
	aware that there a	are significant pe	nalties for submitting false inform	nation, including possibil	ity of fines and i	imprisonment for						
	knowing violatio	ons. As specified	in Tennessee Code Annotated	Section 39-16-702(a)(4)	, this declaration	n 1s made under						
	penalty of perjury	y.										
	Name:			Title:								
	Signature											
	Signature:											
	Signature:			Data Signad	1							
NOT	Signature: Telephone: ()) - NOI forms TDI	EC may request additional inform	Date Signed:/	/	e the eligibility fo						

Submit the original completed and signed form to <u>Water.Permits@tn.gov</u> or: Biosolids NOI Processing - Division of Water Resources William R. Snodgrass - Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor Nashville, TN 37243-1102



02809 Metro Desoto WWTP Mr. Robert Richmond 11299 Stateline Rd Olive Branch, MS 38654

Report Number : 17-136-0254

Analytical Method: 6010C

Chickasaw Trails WWTP Project Information :

Report Date : 05/24/2017 Received : 5/16/2017

Rendell H. Thomas

Randy Thomas Project Manager

Lab No : 97353 Sample ID : Sludge					Matrix Sampled	: Sludg : 5/15,	dge 15/2017 13:35	
Tost	Results	Units	MQL	DF	Date / Time	Ву	Analytical	

REPORT OF ANALYSIS

Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
TCLP Herbicide Extraction	Combined			1	05/18/17 17:50	SAJ	SW-1311
TCLP Metals Extraction	Combined			1	05/18/17 17:50	SAJ	SW-1311
TCLP Pesticide Extraction	Combined			1	05/18/17 17:50	SAJ	SW-1311
TCLP SVOC Extraction	Combined			1	05/18/17 17:50	SAJ	SW-1311
TCLP VOC ZHE Extraction	Combined			1	05/18/17 18:03	SAJ	SW-1311 (ZHE)

Prep Batch(es): L333788 05/19/17 10:40

Prep Method:	3005A							
Test		Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Batch
TCI P Arsenic		< 0.025	mg/L	0.025	1	05/19/17 20:03	KKM	L333998
TCLP Barium		0.050	mg/L	0.025	1	05/19/17 20:03	KKM	L333998
TCLP Cadmium		<0.005	mg/L	0.005	1	05/19/17 20:03	KKM	L333998
TCLP Chromium		<0.010	mg/L	0.010	1	05/22/17 17:48	KKM	L334088
TCLP Lead		<0.010	mg/L	0.010	1	05/22/17 17:48	ККМ	L334088
TCLP Selenium		<0.050	mg/L	0.050	1	05/19/17 20:03	KKM	L333998
TCLP Silver		<0.005	mg/L	0.005	1	05/19/17 20:03	KKM	L333998

Qualifiers/ Definitions

DF **Dilution Factor**

Method Quantitation Limit MQL



02809 Metro Desoto WWTP Mr. Robert Richmond 11299 Stateline Rd Olive Branch , MS 38654

Project Chickasaw Trails WWTP Information :

REPORT OF ANALYSIS

Report Date : 05/24/2017 Received : 5/16/2017

Rendell H. Thomas

Randy Thomas Project Manager

Sampled: 5/15/2017 13:35

Matrix: Sludge

Lab No : 97353

Report Number : 17-136-0254

Sample ID : Sludge

05/19/17 11:25 L333803 7470A Prep Batch(es): Analytical Method: 7470A **Prep Method:** DF Date / Time By Analytical MQL Units Results Test Batch Analyzed L333835 0.0200 1 05/19/17 16:52 ABC mg/L < 0.0200 **TCLP Mercury** 05/22/17 18:00 L334123 Prep Batch(es): Analytical Method: 8081A **Prep Method:** 3510C Date / Time By Analytical MQL DF Units Results Test Batch Analyzed L334285 10 05/23/17 01:47 VIC 0.001600 TCLP Endrin < 0.001600 mg/L 05/23/17 01:47 VIC L334285 0.001600 10 mg/L TCLP gamma-BHC < 0.001600 L334285 05/23/17 01:47 VIC mg/L 0.001600 10 < 0.001600 TCLP Methoxychlor L334285 05/23/17 01:47 VIC mg/L 0.01200 10 < 0.01200 **TCLP** Toxaphene L334285 0.008000 10 05/23/17 01:47 VIC mg/L TCLP Chlordane < 0.008000 05/23/17 01:47 VIC L334285 10 mg/L 0.001600 < 0.001600 TCLP Heptachlor Epoxide L334285 mg/L 0.001600 10 05/23/17 01:47 VIC < 0.001600 TCLP Heptachlor L334285 Limits: 36-116% 10 05/23/17 01:47 VIC 82.04 Surrogate: Decachlorobiphenyl L334285 10 05/23/17 01:47 VIC Limits: 25-123% 41.21 Surrogate: Tetrachloro-m-xylene Prep Batch(es): L333930 05/22/17 08:00 Analytical Method: 8151A Pren Method: 8151A

Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Batch	
TCLP 2,4-D	<0.0200	mg/L	0.0200	1	05/23/17 14:11	VIC	L334303	

Qualifiers/ DF Dilution Factor Definitions MQL Method Quantitation Limit



02809 Metro Desoto WWTP Mr. Robert Richmond 11299 Stateline Rd Olive Branch, MS 38654

Project Chickasaw Trails WWTP Information :

Report Date : 05/24/2017 Received : 5/16/2017

Rendell H. Thomas

L334002

L334002

Report Number : 17-136-0254

REPORT OF ANALYSIS

Randy Thomas Project Manager

Matrix: Sludge

Lab No : 97353 Sludge Sa

Sample ID : Sludge	ample ID : Sludge						Sampled:	5/15/	2017 13:35
Analytical Method:	8151A 8151A		Prep Batch(es):	L333930	05/22/17 08	3:00			
Test		Results	Units	MQL	DI	F	Date / Time Analyzed	Ву	Analytical Batch
TCLP 2,4,5-TP (Silvex)		<0.0020	mg/L	0.0020		1	05/23/17 14:11	VIC	L334303
Surrogate: DC/	AA		48.00	Limits:	20-120%		1 05/23/17 14:1	.1 VI	C L334303
Analytical Method:	8260B		Prep Batch(es):	L333973	05/20/17 1	2:09)		
Prep Method:	5030B								
Test		Results	Units	MQL	D	F	Date / Time Analyzed	Ву	Analytical Batch
TCLP Benzene		<0.0100	mg/L	0.0100)	1	05/20/17 19:21	LAT	L334002
TCLP Carbon Tetrachlo	oride	<0.0100	mg/L	0.0100)	1	05/20/17 19:21	LAT	L334002
TCLP Chlorobenzene		< 0.0100	mg/L	0.0100)	1	05/20/17 19:21	LAT	L334002
TCLP Chloroform		< 0.0100	mg/L	0.0100)	1	05/20/17 19:21	LAT	L334002
TCLP 1,4-Dichlorobenz	zene	< 0.0100	mg/L	0.0100)	1	05/20/17 19:21	LAT	L334002
TCLP 1,2-Dichloroetha	ne	< 0.0100	mg/L	0.0100)	1	05/20/17 19:21	LAT	L334002
TCLP 1,1-Dichloroethe	ne	< 0.0100	mg/L	0.0100)	1	05/20/17 19:21	LAT	L334002
TCLP Methyl Ethyl Ket	one (MEK)	<0.200	mg/L	0.200	0	1	05/20/17 19:21	LAT	L334002
TCLP Tetrachloroether	ne	<0.0100	mg/L	0.0100	0	1	05/20/17 19:21	LAT	L334002
TCLP Trichloroethene		< 0.0100	mg/L	0.0100	0	1	05/20/17 19:21	LAT	L334002
TCLP Vinyl Chloride		< 0.0100	mg/L	0.0100	0	1	05/20/17 19:21	LAT	L334002
Surrogate: 4-E	Bromofluorobenzene		98.4	Limits	: 71-137%		1 05/20/17 19:	21 LA	AT L334002
Surrogate: Dit	promofluoromethane		95.4	Limits	: 70-128%		1 05/20/17 19:	21 LA	AT L334002

88.8

95.4

Qualifiers/ **Dilution Factor** DF Definitions

Surrogate: Toluene-d8

Surrogate: 1,2-Dichloroethane - d4

Method Quantitation Limit MQL

1 05/20/17 19:21 LAT

1 05/20/17 19:21 LAT

Limits: 63-136%

Limits: 70-130%



02809 Metro Desoto WWTP Mr. Robert Richmond 11299 Stateline Rd Olive Branch , MS 38654

Project Chickasaw Trails WWTP Information : Report Date : 05/24/2017 Received : 5/16/2017

Rendell H. Thomas

Report Number : 17-136-0254

REPORT OF ANALYSIS

Randy Thomas Project Manager

Sampled: 5/15/2017 13:35

Matrix: Sludge

Lab No : 97353 Sample ID : Sludge

Analytical Method:8270CPrep Method:3510C

Prep Batch(es): L334021 05/22/17 11:00

Prep Method: 5510C								
Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Batch	
						000	1224102	
TCLP 2-Methylphenol	<0.020	mg/L	0.020	1	05/22/17 16:16	CGC	L334103	
TCLP 3&4 Methylphenol	<0.040	mg/L	0.040	1	05/22/17 16:16	CGC	L334103	
TCLP 2,4-Dinitrotoluene	<0.020	mg/L	0.020	1	05/22/17 16:16	CGC	L334103	
TCLP Hexachlorobenzene	<0.020	mg/L	0.020	1	05/22/17 16:16	CGC	L334103	
TCLP Hexachlorobutadiene	<0.020	mg/L	0.020	1	05/22/17 16:16	CGC	L334103	
TCLP Hexachloroethane	<0.020	mg/L	0.020	1	05/22/17 16:16	CGC	L334103	
TCLP Nitrobenzene	<0.020	mg/L	0.020	1	05/22/17 16:16	CGC	L334103	
TCLP Pentachlorophenol	<0.040	mg/L	0.040	1	05/22/17 16:16	CGC	L334103	
TCLP Pyridine	<0.020	mg/L	0.020	1	05/22/17 16:16	CGC	L334103	
TCLP 2,4,5-Trichlorophenol	<0.020	mg/L	0.020	1	05/22/17 16:16	CGC	L334103	
TCLP 2,4,6-Trichlorophenol	<0.020	mg/L	0.020	1	05/22/17 16:16	CGC	L334103	
Surrogate: TCLP 2.4.6-Tribrom	ophenol	52.6	Limits: 40-125%		1 05/22/17 16:1	6	L334103	
Surrogate: TCLP 2-Fluorobiphe	nyl	49.5	Limits: 38-107%		1 05/22/17 16:1	16	L334103	
Surrogate: TCLP 2-Fluoropheno	bl	26.9	Limits: 20-110%		1 05/22/17 16:	16	L334103	
Surrogate: TCLP 4-Terphenyl-c	14	74.3	Limits: 33-122%		1 05/22/17 16:	16	L334103	
Surrogate: TCLP Nitrobenzene-	·d5	54.3	Limits: 29-110%		1 05/22/17 16:	16	L334103	ł
Surrogate: TCLP Phenol-d6		21.0	Limits: 10-115%		1 05/22/17 16:	16	L334103	ł

Qualifiers/ Definitions DF Dilution Factor

MQL Method Quantitation Limit



02809 Metro Desoto WWTP Mr. Robert Richmond 11299 Stateline Rd Olive Branch , MS 38654

Project Chickasaw Trails WWTP Information : Digester Sludge

Report Date : 5/30/2017

Report Number : 17-143-0275

REPORT OF ANALYSIS

Received : 5/23/2017

Lab No : 93502 Sample ID : Grab 1					Matrix Sampled	s /2017 8:06		
Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method	
Fecal Coliform MPN/g	333000	MPN/g - dry	90900	1	05/23/17 14:40	SBA	9221E-2011	
% Moisture	96.7	%	0.100	1	05/24/17 15:02	CJR	2540G-2011	

Lab No : 93503 Sample ID : Grab 2		a			Matrix: Solids Sampled: 5/23/2017 8:06			
Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method	-
Fecal Coliform MPN/g	<83300	MPN/g - dry	83300	1	05/23/17 14:40	SBA	9221E-2011	
% Moisture	96.4	%	0.100	1	05/24/17 15:02	CJR	2540G-2011	

Lab No : 93504					Matrix	Solid	s	
Sample ID : Grab 3					Sampled	5/23	/2017 8:06	
Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method	
Fecal Coliform MPN/g	164000	MPN/g - dry	53600	1	05/23/17 14:40	SBA	9221E-2011	_

0.100

%

94.4

Lab No : 93505 Sample ID : Grab 4					Matrix: Sampled:	Solid	s 3/2017 8:06
Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Fecal Coliform MPN/g	<81100	MPN/g - dry	81100	1	05/23/17 14:40	SBA	9221E-2011
% Moisture	96.3	%	0.100	1	05/24/17 15:02	CJR	2540G-2011

Qualifiers/ DF D Definitions

% Moisture

Dilution Factor

MQL Method Quantitation Limit

1 05/24/17 15:02 CJR 2540G-2011



02809 Metro Desoto WWTP Mr. Robert Richmond 11299 Stateline Rd Olive Branch , MS 38654

Project Chickasaw Trails WWTP Information : Digester Sludge

Report Date : 5/30/2017

Report Number : 17-143-0275

REPORT OF ANALYSIS

Received : 5/23/2017

Lab No : 93506					Matrix	Solid	s
Sample ID : Grab 5					Sampled	5/23	/2017 8:06
Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Fecal Coliform MPN/g	796000	MPN/g - dry	55600	1	05/23/17 14:40	SBA	9221E-2011
% Moisture	94.6	%	0.100	1	05/24/17 15:02	CJR	2540G-2011

Lab No : 93507 Sample ID : Grab 6					Matrix: Sampled:	Solid 5/23	s /2017 8:06	
Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method	
Fecal Coliform MPN/g	65500	MPN/g - dry	54500	1	05/23/17 14:40	SBA	9221E-2011	
% Moisture	94.5	%	0.100	1	05/24/17 15:02	CJR	2540G-2011	

Lab No : 93508 Sample ID : Grab 7					Matrix: Sampled:	Solid 5/23	s /2017 8:06	
Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method	
Fecal Coliform MPN/g	<88200	MPN/g - dry	88200	1	05/23/17 14:40	SBA	9221E-2011	1
% Moisture	96.6	%	0.100	1	05/24/17 15:02	CJR	2540G-2011	

Qualifiers/ Definitions

DF Dilution Factor

MQL Method Quantitation Limit

Geometric Mean Calculation

Date: 5/30/2017

Analyst: C. Cook

Report Number: 17-143-0275

			Measured V	alues		Conver	rsion to Dry Weight
			MPN	Highest			Dry Weight
			Index	ml	%	%	MPN/g
#		Sample Number	Value	used	moisture	solids	
1	L	93502	11,000.0	0.001	96.7	0.03	333,333
2	L	93503	2,999.0	0.001	96.4	0.04	83,306
3	L	93504	9,200.0	0.001	94.4	0.06	164,286
4	L	93505	2,999.0	0.001	96.3	0.04	81,054
5	L	93506	43,000.0	0.001	94.6	0.05	796,296
6	L	93507	3,600.0	0.001	94.5	0.06	65,455
7	L	93508	2,999.0	0.001	96.6	0.03	88,206

Geometric Mean (using above values)

149,891.5



6/15/2017

Metro Desoto WWTP Mr. Robert Richmond 11299 Stateline Rd Olive Branch, MS, 38654

Ref: Analytical Testing Lab Report Number: 17-160-0296 Client Project Description: Chickasaw Trails WWTP

Dear Mr. Robert Richmond: Waypoint Analytical, Inc. received sample(s) on 6/9/2017 for the analyses presented in the following report.

The above referenced project has been analyzed per your instructions. The analyses were performed in accordance with the applicable analytical method.

The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, method validations, instrumentation maintenance and calibration for all parameters (NELAP and non-NELAP) were performed in accordance with guidelines established by the USEPA (including 40 CFR 136 Method Update Rule May 2012) and NELAC unless otherwise indicated. Any parameter for which the laboratory is not officially NELAP accredited is indicated by a '~' symbol. These are not included in the scope because NELAP accreditation is either not available or has not been applied for. Additional certifications may be held/are available for parameters, where NELAP accreditation is not required or applicable. A full list of certifications is available upon request.

Certain parameters (chlorine, pH, dissolved oxygen, sulfite...) are required to be analyzed within 15 minutes of sampling. Usually, but not always, any field parameter analyzed at the laboratory is outside of this holding time. Refer to sample analysis time for confirmation of holding time compliance.

The results are shown on the attached Report of Analysis(s). Results for solid matrices are reported on an asreceived basis unless otherwise indicated. This report shall not be reproduced except in full and relates only to the samples included in this report.

Please do not hesitate to contact me or client services if you have any questions or need additional information.

Sincerely,

Randell H. Thomas

Randy Thomas Project Manager

Laboratory's liability in any claim relating to analyses performed shall be limited to, at laboratory's option, repeating the analysis in question at laboratory's expense, or the refund of the charges paid for performance of said analysis.

Alabama #4	0750	Louisiana	#04015	VA NELAP	#460181	Texas	#T104704180-11-6	Arkansas	#88-0650
Mississippi		California	#2904	NC	#415	Oklahoma	#9311	Virginia	#00106
Kentucky #9	0047	Tennessee	#TN02027	EPA	#TN00012	Kentucky UST	#41		





02809 Metro Desoto WWTP Mr. Robert Richmond 11299 Stateline Rd Olive Branch , MS 38654

Project Chickasaw Trails WWTP Information :

Report Date : 6/15/2017

Report Number : 17-160-0296

REPORT OF ANALYSIS

Received : 6/9/2017

Lab No : 96879 Sample ID : Digester Sludge Matrix: **Solids** Sampled: **6/8/2017 13:03**

Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Aroclor 1016	<0.0749	mg/Kg	0.0749	1	06/15/17 04:10	VIC	8082
Aroclor 1221	<0.0749	mg/Kg	0.0749	1	06/15/17 04:10	VIC	8082
Aroclor 1232	<0.0749	mg/Kg	0.0749	1	06/15/17 04:10	VIC	8082
Aroclor 1242	<0.0749	mg/Kg	0.0749	1	06/15/17 04:10	VIC	8082
Aroclor 1248	<0.0749	mg/Kg	0.0749	1	06/15/17 04:10	VIC	8082
Aroclor 1254	<0.0749	mg/Kg	0.0749	1	06/15/17 04:10	VIC	8082
Aroclor 1260	<0.0749	mg/Kg	0.0749	1	06/15/17 04:10	VIC	8082
Surrogate: Decachlorobiphenyl	63.1		Limits: 25-125%	1 0	6/15/17 04:10 \	/IC	8082
Surrogate: Tetrachloro-m-xylene	93.8		Limits: 25-125%	1 0	6/15/17 04:10 \	/IC	8082



Cooler Receipt Form

Customer Number	: 02809
Customer Name:	Metro Desoto WWTP
Damant Niccosham	17 160 0206

Report Number: 17-160-0296

		Shippin	g Method			
◯ Fed Ex	◯ US Postal	🕒 Lab		Other :		
	◯ Client		ər	Thermometer ID:	#8	
Shipping contain	ner/cooler uncompromi	sed?	• Yes	🔿 No		
Number of coole	ers received		1			
Custody seals in	tact on shipping contai	ner/cooler?	⊖ Yes	🔿 No	Not Requi	ired
Custody seals in	tact on sample bottles	?	⊖ Yes	🔿 No	Not Requi	ired
Chain of Custod	y (COC) present?		• Yes	🔘 No		
COC agrees with	h sample label(s)?		• Yes	🔿 No		
COC properly co	ompleted		• Yes	🔿 No		
Samples in prop	er containers?		Yes	🔘 No		
Sample containe	ers intact?		Yes	🔘 No		
Sufficient sample	e volume for indicated	test(s)?	Yes	🔿 No		
All samples rece	eived within holding time	e?	Yes	🔿 No		
Cooler temperat	ure in compliance?		Yes	🔿 No		
Cooler/Samples Samples were co process had beg	arrived at the laborato onsidered acceptable a gun.	ry on ice. as cooling	Yes	⊖ No		
Water - Sample	containers properly pre	eserved) Yes	🔘 No	N/A	
Water - VOA via	Is free of headspace		⊖ Yes	🔘 No	N/A	
Trip Blanks rece	ived with VOAs		⊖ Yes	○ No	N/A	
Soil VOA method	d 5035 – compliance c	riteria met	◯ Yes	🔘 No	N/A	
High concent	tration container (48 hr)		w concentration EnC	ore samplers (48 h	nr)
High concent	ration pre-weighed (me	ethanol -14 d) 🗌 Lo	w conc pre-weighed	vials (Sod Bis -14 c	d)
Special precaution	ons or instructions inclu	uded?	⊖ Yes	No		
Comments:						

Signature: Kristina A. McAdams

Date & Time: 06/09/2017 13:51:04

			5		r cus	I ODY R	ECORI	O ork Orde	Metro Des Chickasav	oto WWTP / Trails WWTP		200 tt	809 -09-2017 3:48:18
iompany Aitchel	Name I Technical Services, In	5	Phone#: 6	62-893-0773		Fax Results	-			1000	The Decision		
roject/Si	te:		Email: rwri FID#:	nts@yahoo.co	ε	RUSH				Note special de	ysis keques itection limi	ts or metho	(spi
Chickas	aw Trails WWTP		PA#: 5500			Ice							
roject #:			Matrix:	Wastewater 1				1	То				F
Project Ma	anager/Contact: Richmond			2 Aqueous \$ Soil/Sedimen	4 500 5 011/ t 6 0th	age Solvent Ier	BOD	VH ₃ -I TSS	otal P(Preserva
t of ont.	Sample ID/Number	Depth	Sample Date	Sample Time	Matrix	Type		N	СВ				ation
7	Digester Sludge		6/8/17	1303	MM	Grab			×				
									<				Cool <6°C
	-												
mpled By VR		Method of Ship	ment			Remarks							
INQUSH	IED BY (sign)	Courier		DATF	TIME	RECEIVED BY Total	and		0				
LINQUSH	ED BY (sign)	A		0/a/17 DATE	TIME	RECEIVED BY (sign	E C	Jan	On	6 DA	TE]	IME O	Sample Delivery
LINQUSH	Proving Contraction		6.9.1	PATE 13	19E	RECEIVED BY LE	tupiet int			AD DA		IME	
	p	2.1	2	in the second	in. M		ala			11/2	2	2	
	> -		1	-	2								



4/5/2017

Metro Desoto WWTP Mr. Robert Richmond 11299 Stateline Rd Olive Branch, MS, 38654

Ref: Analytical Testing Lab Report Number: 17-083-0254 Client Project Description: Chickasaw Trails

Dear Mr. Robert Richmond: Waypoint Analytical, Inc. received sample(s) on 3/24/2017 for the analyses presented in the following report.

The above referenced project has been analyzed per your instructions. The analyses were performed in accordance with the applicable analytical method.

The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, method validations, instrumentation maintenance and calibration for all parameters (NELAP and non-NELAP) were performed in accordance with guidelines established by the USEPA (including 40 CFR 136 Method Update Rule May 2012) and NELAC unless otherwise indicated. Any parameter for which the laboratory is not officially NELAP accredited is indicated by a '~' symbol. These are not included in the scope because NELAP accreditation is either not available or has not been applied for. Additional certifications may be held/are available for parameters, where NELAP accreditation is not required or applicable. A full list of certifications is available upon request.

Certain parameters (chlorine, pH, dissolved oxygen, sulfite...) are required to be analyzed within 15 minutes of sampling. Usually, but not always, any field parameter analyzed at the laboratory is outside of this holding time. Refer to sample analysis time for confirmation of holding time compliance.

The results are shown on the attached Report of Analysis(s). Results for solid matrices are reported on an asreceived basis unless otherwise indicated. This report shall not be reproduced except in full and relates only to the samples included in this report.

Please do not hesitate to contact me or client services if you have any questions or need additional information.

Sincerely,

Rendell H. Thomas

Randy Thomas Project Manager

Laboratory's liability in any claim relating to analyses performed shall be limited to, at laboratory's option, repeating the analysis in question at laboratory's expense, or the refund of the charges paid for performance of said analysis.

Alabama #40750 Mississippi Kentucky #90047 Louisiana #04015 California #2904 Tennessee #TN02027 VA NELAP #460181 NC #415 EPA #TN00013

#460181 Texas #415 Oklah #TN00012 Kentu

Texas#T104704180-11-6ArkansasOklahoma#9311VirginiaKentucky UST#41

Arkansas #88-0650 Virginia #00106





CASE NARRATIVE

Client: Metro Desoto WWTP Project: Chickasaw Trails Lab Report Number: 17-083-0254 Date: 4/5/2017

All analytes are being reported on a dry weight basis and as received basis.



02809 Metro Desoto WWTP Mr. Robert Richmond 11299 Stateline Rd Olive Branch, MS 38654

Chickasaw Trails Project Information :

Report Date : 4/5/2017

Report Number : 17-083-0254

REPORT OF ANALYSIS

Received : 3/24/2017

Matrix: Solids

Lab No : 96266

Sample ID : Digester					Sampled:	3/23	/2017 10:04	_
Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method	
04 Moisture	96.5	%	0.100	1	03/27/17 16:33	CJR	2540G-2011	
Ammonia Nitrogen	89.0	mg/Kg	25.0	1	04/04/17 09:00	ZBD	4500NH3C-2011	
Rischemical Oxygon Demand (5-day)	6670	mg/Kg	1200	1	03/24/17 11:03	DB2	5210B-2011	
Biochemical Oxygen Demand (5 ddy)	20300	ma/Ka	3000	20	03/27/17 09:00	SNB	5220D-2011	
	20500	mg/Kg	1.00	1	03/31/17 18:32	BKN	9056	
Nitrate (NO3-N)	<1210	mg/Kg	1210	1	04/03/17 09:00	SMS	SW-9071B	
HEM: OII and Grease	67	5.11.		1	03/23/17 10:04	FLD	FIELD ~	J
рн	2.50	%	0.100	1	03/27/17 16:33	CJR	2540G-2011	
Total Solids	3.50	ma/Ka	50.0	1	04/04/17 14:25	CLP	4500NORGD-201:	
Total Kjeldahl Nitrogen	1140	mg/Kg	25.0	1	04/04/17 14:27	CLP	365.4	
Total Phosphorus	336	mg/Kg	25.0	- 1	04/03/17 22:08	ккм	6010C	
Total Arsenic	<1.00	mg/Kg	1.00	1	04/03/17 22:00	KKM	60100	
Total Cadmium	<0.100	mg/Kg	0.100	T	. 04/03/17 22:08		60100	
Total Chromium	1.73	mg/Kg	0.250	1	. 04/03/17 22:08	KKM	6010C	
Total Copper	28.2	mg/Kg	0.250	1	04/03/17 22:08	KKM	6010C	
Total Lead	0.941	mg/Kg	0.300	1	04/03/17 22:08	KKM	6010C	
Mercury (Total)	< 0.0133	mg/Kg	0.0133	t	03/27/17 13:57	ABC	7471A	
Total Molybdenum	< 0.250	mg/Kg	0.250	i	1 04/03/17 22:08	KKM	6010C	
Total Nickel	1.19	mg/Kg	0.250	Ì	1 04/03/17 22:08	KKM	6010C	
Total Potassium	116	mg/Kg	5.00		1 04/03/17 22:08	KKM	6010C	
	<1.00	mg/Kg	1.00		1 04/03/17 22:08	KKM	6010C	
Total Silver	<0.250	mg/Kg	0.250		1 04/03/17 22:08	KKM	6010C	
	32.4	ma/Ka	0.500		1 04/03/17 22:08	KKM	6010C	
I OTAL ZINC	32.4							

Qualifiers/ Definitions **Dilution Factor**

DF

Method Quantitation Limit MQL



02809 Metro Desoto WWTP Mr. Robert Richmond 11299 Stateline Rd Olive Branch , MS 38654

Project Chickasaw Trails Information :

Report Date : 4/5/2017

Report Number : 17-083-0254

REPORT OF ANALYSIS

Received : 3/24/2017

Matrix: Solids

Lab No : 96266

Lab No : 96266 Sample ID : Digester					Sampled:	3/23	/2017 10:04
Test	Results	Units	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
% Moisture	96.5	%	0.100	1	03/27/17 16:33	CJR	2540G-2011
Ammonia Nitrogen	2540	mg/Kg - dry	714	1	04/04/17 09:00	ZBD	4500NH3C-2011
Biochemical Oxygen Demand (5-day)	191000	mg/Kg - dry	34300	1	03/24/17 11:03	DB2	5210B-2011
COD (Chemical Oxygen Demand)	580000	mg/Kg - dry	85700	20	03/27/17 09:00	SNB	5220D-2011
Nitrate (NO3-N)	597	mg/Kg - dry	28.6	1	03/31/17 18:32	BKN	9056
HEM: Oil and Grease	<34600	mg/Kg - dry	34600	1	04/03/17 09:00	SMS	SW-9071B
pH	6.7	s.u.		1	03/23/17 10:04	FLD	FIELD ~
Total Solids	3.50	%	0.100	1	03/27/17 16:33	CJR	2540G-2011
Total Kieldahl Nitrogen	32600	mg/Kg - dry	1430	1	04/04/17 14:25	CLP	4500NORGD-201:
Total Phosphorus	9600	mg/Kg - dry	714	1	. 04/04/17 14:27	CLP	365.4
Total Arsenic	<28.6	mg/Kg - dry	28.6	1	04/03/17 22:08	KKM	6010C
Total Cadmium	<2.86	mg/Kg - dry	2.86	1	04/03/17 22:08	KKM	6010C
Total Chromium	49.4	mg/Kg - dry	7.14	t	04/03/17 22:08	KKM	6010C
Total Copper	806	mg/Kg - dry	7.14	1	04/03/17 22:08	KKM	6010C
Total Lead	26.9	mg/Kg - dry	8.57	÷	1 04/03/17 22:08	KKM	6010C
Mercury (Total)	< 0.380	mg/Kg - dry	0.380		1 03/27/17 13:57	ABC	7471A
Total Molybdenum	<7.14	mg/Kg - dry	7.14		1 04/03/17 22:08	KKM	6010C
Total Nickel	34.0	mg/Kg - dry	7.14		1 04/03/17 22:08	KKM	6010C
Total Potassium	3310	mg/Kg - dry	143		1 04/03/17 22:08	KKM	6010C
Total Selenium	<28.6	mg/Kg - dry	28.6		1 04/03/17 22:08	KKM	6010C
Total Silver	<7.14	mg/Kg - dry	7.14		1 04/03/17 22:08	KKM	6010C
Total Zinc	926	mg/Kg - dry	14.3		1 04/03/17 22:08	KKM	6010C

Qualifiers/ Definitions Dilution Factor

DF

MQL Method Quantitation Limit



int E.

		Cooler Rec	eipt Fori	n	
Customer Number	:: 02809	AUTD			
Customer Name:	Metro Desoto W	WIP			
Report Number.	11-000 0201	Shipping	Method		
	LIS Postal	A Lah		Other :	
Fed Ex	Oliopt	Courier		Thermometer ID:	#10
UPS	Client	Counter			
Shipping container	/cooler uncomprom	ised?	Yes	No	
Number of coolers	received		1		
Custody seals inta	ct on shipping conta	ainer/cooler?	Yes	No	Not Required
Custody seals inta	ct on sample bottle	s?	Yes	No	Not Required
Chain of Custody	(COC) present?		Yes	No	
COC agrees with s	sample label(s)?		Yes	No	
COC properly com	npleted		Yes	No	
Samples in proper	r containers?		Yes	No	
Sample containers	s intact?		Yes	No	
Sufficient sample	volume for indicated	d test(s)?	Yes	No	
All samples receiv	ed within holding tir	me?	Yes	No	
Cooler temperatur	re in compliance?		Yes	No	
Cooler/Samples a Samples were cor process had begu	rrived at the laborat nsidered acceptable In.	ory on ice. as cooling	Yes) No	
Water - Sample c	ontainers properly p	preserved	• Yes	No	N/A
Water - VOA vials	free of headspace		Yes	No	N/A
Trip Blanks receiv	ved with VOAs		Yes	No	N/A
Soil VOA method	5035 – compliance	criteria met	Yes	No	N/A
High concentr	ation container (48	hr)	Lo	w concentration En	Core samplers (48 hr)
High concentr	ation pre-weighed (methanol -14 d)) Lo	w conc pre-weighed	d vials (Sod Bis -14 d)
Special precautio	ns or instructions in	cluded?	Yes	No	
Comments:					
Any reg	gulatory non-complia	ance issues will	be record	ded on non-complia	ince report.

Signature: Rebekah Ross

Date & Time: 03/24/2017 12:57:57



2790 Whitten Road Memohic TN 20122





CHAIN-OF-CUSTOL

Metro	Desot	2 444	9	5.5
Chick	asaw T	rails		

Kit ID:	0000078727
Initiated By:	Randy Thomas
Project Com	mment

Company N	ame		Company Number		Client P	roject N	Manager/Contact		Purchase	Order Number
Mitchell Metro Desor	Technical	Survius	02809		Metro De	esoto W	WTP			5408
Site Name			Project Number			Addit	ional charges apply		Method o	UPS USPS
7 In Masau	s Trails				Spec	ial Detec	ction Limits(s)		Courie	r 🗌 Client Drop Off
SELFES Haules	Waste				Date Re	sults Ne	eded		Other	
LIMS Projec	ct ID		Project Manager Pho	ne#	Project	Manag	er Email		Site/Facil	ity ID #
			(662) 893-0773							
Date	Time		Sample ID	Matrix	Grab/ Comp	# of Cont	Container Type	Pres	ervation	Analyses
alaaba	inni	N	1	Aqueous	G	1	Plastic - Pint	r	IONE	pH/TSS/BOD
5/25/11	1004	Diges		Aqueous	G	1	Plastic - Pint	H2SO4	1 - Sulfuric Acid	COD
3 23/17	1004	Diag	b) Cr	Aqueous	G	1	Plastic - Pint	HNO	3 - Nitric Acid	As/Cd/Cr/Cu/Pb/Hg/Ni/Ag/Z n
2/02/17	1004	Dians	der	Aqueous	G	1	Glass - 4oz	H2SO	4 - Sulfuric Acid	O&G

	For Laborato	ory Use Only	Sampled by (Name - Print)	Client Remarks	s/Comments	
lce	Custody	Lab Comments	RWR	- Samp	ple pH is 6.7	
	Seals		Relinquished by: (SIGNATURE)	Date Time	Received by: (SIGNATURE)	Date Time
(WN	Y/N		AAN.V	3/24/17 1215	autho	324171215
			Relinguished by: (SIGNATURE)	Date Time	Received by (SIGNATURE)	Date Time
Blank/C	oler Temp)					
	S. T		Relinquished by: (SIGNATURE)	Date Time	Received by: (SIGNATURE)	Date Time
	1.00	7-16	Jutto	32417/241	Auth	324171240
L			1/1		\bigcirc /	







Owner:	Carl Nuckolls
Operator:	Jamerson Farms
Address:	Farm - Nuckolls Road
	Macon, TN
Phone:	Jamerson - 901-485-5516

