

Texas Commission on Environmental Quality Investigation Report

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Customer: Blue Ridge Landfill TX, LP
Customer Number: CN602820599

Regulated Entity Name: BLUE RIDGE LANDFILL

Regulated Entity Number: RN102610102

Investigation # 1554220

Investigator: TREY THUMANN

Incident Numbers

Site Classification MULTISECTOR GENERAL
PERMIT FOR INDUSTRIAL
WW

Conducted: 03/29/2019 -- 03/29/2019

NAIC Code: 562212

NAIC Code: 486210

SIC Code: 4922

SIC Code: 4953

SIC Code: 1521

Program(s): STORMWATER

Investigation Type: Compliance Investigation

Location: LOCATED ON 2200 FM 521

Additional ID(s): TXR05S302

Address: 2200 FM 521 RD,
FRESNO, TX , 77545

Local Unit: REGION 12 - HOUSTON

Activity Type(s): SWMSGPRC - SW MSGP Recon

Principal(s):

Role	Name
RESPONDENT	BLUE RIDGE LANDFILL TX LP

Contact(s):

Role	Title	Name	Phone
PARTICIPATED IN	ENVIRONMENTAL SPECIALIST	MS AMY KUBINSKI	Phone (346) 269-2946
PARTICIPATED IN	ENVIRONMENTAL SPECIALIST	MR CHANCE SEELY	Phone (281) 835-6142
PARTICIPATED IN	DIVISION MANAGER	MR CLINT DICKERSON	Phone (281) 835-6142
REGULATED ENTITY MAIL CONTACT	AREA ENVIRONMENTAL MANAGER	MR SCOTT TREBUS	Fax (713) 675-3660 Phone (713) 726-7506
REGULATED ENTITY CONTACT	ENVIRONMENTAL SPECIALIST	MS AMY KUBINSKI	Phone (346) 269-2946

BLUE RIDGE LANDFILL - FRESNO

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Other Staff Member(s):

Role	Name
QA Reviewer	KYLE LINVILLE
Supervisor	KARINA ROCHA

Associated Check List

<u>Checklist Name</u>	<u>Unit Name</u>
STORMWATER MSGP RECONNAISSANCE INVESTIGATION	MSGP Recon

Investigation Comments:

INTRODUCTION

On March 29, 2019, Mr. Trey Thumann, Environmental Investigator with the Texas Commission on Environmental Quality (TCEQ) Houston Region Office, conducted a stormwater reconnaissance (recon) investigation of the Blue Ridge Landfill (BRL). BRL is located at 2200 Farm to Market (FM) 521 Road (Rd), Fresno, Fort Bend County, Texas 77545 (Attachment 1).

No notification of the investigation was given to the facility since the investigation conducted was a recon. A subsequent odor survey (Investigation No. 1554501) was being conducted simultaneously as the on-site recon investigation.

A TCEQ Exit Interview Form was not issued because no issues were noted during the investigation. A General Compliance (GC) letter was issued.

BACKGROUND

The TCEQ Houston Region Office files were reviewed and a TCEQ database search was conducted pursuant to this investigation. The TCEQ has received seven prior water quality complaints regarding the facility in the past five years and has conducted three investigations in response to the complaints.

Incident Nos. 251718 and 253606 were received on January 31, 2017 and February 28, 2017, respectively. Investigation No. 1401135 was conducted on March 2, 2017 to address the allegations and no violations were noted.

Incident Nos. 287186, 287186A, 287186B, and 287186C were received on June 23, 28, 29, 2018 and July 5, 2018, respectively. Investigation No. 1499984 was conducted on July 4, 2018 and July 10, 2018 to address the allegations. Three alleged violations were noted during the investigation and remain outstanding.

Incident No. 293031 was received on September 24, 2018. Investigation No. 1524731 was conducted on October 23, 2018 to address the allegations. Three outstanding alleged violations were resolved during the investigation.

GENERAL FACILITY AND PROCESS INFORMATION

BRL is located at 2200 Farm to Market (FM) 521 Road, Fresno, Texas 77545. BRL is a Type I landfill which is authorized to operate by TCEQ Municipal Solid Waste (MSW) Permit No. 1505A. The surrounding land use includes industrial facilities and residential subdivisions (Attachment 1).

The landfill is authorized to dispose of MSW including household solid waste, commercial solid waste, construction and demolition waste, and yard waste; Class 1, Class 2, and Class 3 non-hazardous industrial solid waste; and certain special wastes. Liquid waste will be accepted at the Liquid Waste Bulking Facility for stabilization and subsequent disposal. BRL may not accept regulated hazardous waste, prohibited polychlorinated biphenyls, or untreated medical waste.

Landfill cells utilize a landfill liner system to prevent groundwater contamination and to contain leachate as prescribed in the MSW Permit No. 1505A. Drainage systems on top of the landfill liner system collect leachate which is routed to sumps, pumped to storage tanks, and hauled off-site to Intergulf (Solid Waste Registration No.

BLUE RIDGE LANDFILL - FRESNO

3/29/2019 Inv. # - 1554220

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39068) for disposal. On-site, BRL has leachate tanks that can hold up to 600,000 gallons of leachate. Prior to hauling the leachate off-site, leachate was previously discharged to the City of Pearland Reflection Bay Water Reclamation Facility, Permit No. WQ001034008. The last discharge of leachate to the City of Pearland Reflection Bay Water Reclamation Facility was on June 6, 2016.

Drainage systems below the landfill liner system collect groundwater seepage which is pumped to the stormwater ditches around the landfill. Due to the depth of the cells, groundwater flows upwards towards the composite liner and is pumped off-site to prevent excessive accumulation.

BRL has an active industrial stormwater multi-sector general permit (MSGP) (No. TXR05S302) with the TCEQ (Attachment 2). Coverage under the permit began on April 17, 2005. This general permit provides authorization for point source discharges of stormwater associated with industrial activity and certain non-stormwater discharges to surface waters in the state.

In addition to the general requirements of the MSGP, landfill activities have specific requirements within Sector L of the permit. Sector L has the following benchmark sampling requirements: Total Suspended Solids (TSS) (100 mg/L), and Total Iron (1.3 mg/L) semi-annually.

Non-contaminated stormwater and uncontaminated groundwater seepage is discharged to a stormwater ditch along the perimeter of the landfill and discharged through Outfall 001; thence to the Clear Creek Relief Channel (CCRC) that crosses under FM 521 to the Shadow Creek Ranch Subdivision; thence to Clear Creek Above Tidal in Segment No. 1102 of the San Jacinto-Brazos Coastal Basin (Attachment 3).

ADDITIONAL INFORMATION

On March 29, 2019, Mr. Thumann arrived on-site. An opening conference to discuss the scope of the investigation was conducted with the following BRL personnel: Ms. Amy Kubinski, Environmental Specialist, and Mr. Clint Dickerson, Division Manager.

Mr. Thumann was then escorted around the landfill by Ms. Kubinski and Mr. Dickerson to examine the active phase of the landfill and Outfall 001.

At the time of the investigation Mr. Thumann noted trash fences that were installed at the active phase of the landfill (Attachment 4, Photograph 1). Mr. Thumann also noted the development of new landfill cells adjacent to the active phase (Attachment 4, Photographs 2-3).

The stormwater settling ponds located prior to Outfall 001 were completed and vegetation was noted growing on the bottoms of the ponds. The water discharging through Outfall 001 was predominately clear, but it did contain a brownish tint. Photographs of the area can be seen in Attachment 4, Photographs 4-5.

Samples were collected at Outfall 001 (Chain of Custody (COC) W006908-01) (Attachment 5) at 10:28 a.m. for TSS, Iron and Total Metals. The samples did not exceed the benchmark monitoring levels for TSS and Total Iron in Sector L of the MSGP at Outfall 001. The TSS level at Outfall 001 was 30.1 mg/L and the Total Iron level was 0.806 mg/L. Total Metals did not exceed the Daily Maximum Effluent Limitations.

CONCLUSION

During the recon investigation of BRL conducted on March 29, 2019, no alleged violations were noted.

SUMMARY OF INVESTIGATION FINDINGS

No Violations Associated to this Investigation

Signed Jrey Jh

Environmental Investigator

Date 5-21-19

Signed [Signature]

Supervisor

Date 5/21/19

Attachments: (in order of final report submittal)

___ Enforcement Action Request (EAR)

___ Maps, Plans, Sketches

___ Letter to Facility (specify type) : _____

___ Photographs

Investigation Report

___ Correspondence from the facility

___ Sample Analysis Results

___ Other (specify) : _____

___ Manifests

___ Notice of Registration

Jon Niermann, *Chairman*
Emily Lindley, *Commissioner*
Toby Baker, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 21, 2019

Mr. Scott Trebus
Blue Ridge Landfill
Post Office BOX 879
Fresno, Texas 77545-0879

Re: Compliance Evaluation Investigation at:
Blue Ridge Landfill
RN: 102610102; TCEQ Additional ID: TXR05S302, Investigation No.:1554220

Dear Mr. Trebus:

On March 29, 2019, Mr. Trey Thumann of the Texas Commission on Environmental Quality (TCEQ) Houston Region Office conducted a reconnaissance investigation of the above-referenced operation to evaluate compliance with applicable requirements for stormwater. No violations are being alleged as a result of the investigation.

The TCEQ appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact Mr. Trey Thumann in the Houston Region Office at 713-767-3521.

Sincerely,

A handwritten signature in black ink, appearing to read "K. Rocha".

Karina Rocha
Water Section Assistant Manager
Houston Region Office

KR/TT/tj

**Texas Commission on Environmental Quality
Blue Ridge Landfill
2200 FM 521 Rd, Fresno, Fort Bend County, Texas 77545
Investigation No: 1554220
Conducted: March 29, 2019**

LIST OF ATTACHMENTS


ATTACHMENT 1	Overview Map
ATTACHMENT 2	Permit Information
ATTACHMENT 3	Site Map / Flow Diagram
ATTACHMENT 4	Photographs taken March 29, 2019
ATTACHMENT 5	Sample Results

Attachment 1

Blue Ridge Landfill

Texas Commission on Environmental Quality
Blue Ridge Landfill
2200 FM 521 Rd, Fresno, Fort Bend County, Texas 77545
Investigation No. 1554220
Conducted: March 29, 2019

Legend

 BRL

 BRL

Evenin

Google earth

© 2018 Google



3000 ft

Attachment 2

[Questions or Comments >>](#)

[Search Again](#) [CR Query](#) [TCEQ Home](#)

Water Quality General Permits and Registration Search

Summary of Authorization TXR05S302

Permit/Registration Number: TXR05S302
Authorization Status: ACTIVE
Date Coverage Began: 04/17/2005
Date Coverage Ended:

Authorization Details

Site Name on Permit/Registration: BLUE RIDGE LANDFILL
Authorization Type: INDUSTRIAL
Primary SIC Code: 4953
Activity Code : LF
MS4 Operator : CITY OF FRESNO AND FORT BEND COUNTY
Sector : L
Outfall Number : 001
 OUTFALL LATITUDE - 29.566586
 OUTFALL LONGITUDE - (-95.438272)
 DISCHARGE TO MARINE OR FRESH - MARINE WATER
 RECEIVING WATER BODY - CLEAR CREEK ABOVE TIDAL

Permittee or Registrant Information

Operator: CN602820599 - Blue Ridge Landfill TX, LP
Address: PO BOX 879 FRESNO TX 77545 0879
Annual Fee Billing Address: MICHAEL MACK
 PO BOX 879 FRESNO TX 77545 0879

Permitted Site Information

RN: RN102610102
RE Name: BLUE RIDGE LANDFILL
Site Location: 2200 FM 521 RD FRESNO TX 77545 8214
County: FORT BEND
TCEQ Region: REGION 12 - HOUSTON
Latitude: 29.58
Longitude: -95.43

Regulated Entity Site Information

RE Name: BLUE RIDGE LANDFILL
Site Location: 2200 FM 521 RD FRESNO TX 77545 8214
County: FORT BEND
TCEQ Region: REGION 12 - HOUSTON
Latitude: 29.58056
Longitude: -95.43194

Application History for this Authorization

Application Type	Status	Received Date	Final Action Date
NOTICE OF INTENT	APPROVED	04/22/2005	08/31/2005
NOI-RENEWAL	APPROVED	11/20/2006	05/31/2007
NOI-RENEWAL	APPROVED	10/19/2011	10/19/2011
NOI-RENEWAL	APPROVED	09/30/2016	09/30/2016
NOTICE OF CHANGE	APPROVED	10/24/2016	11/30/2016

Attachment 3

Blue Ridge Landfill

Texas Commission on Environmental Quality
Blue Ridge Landfill
2200 FM 521 Rd, Fresno, Fort Bend County, Texas 77545
Investigation No. 1554220
Conducted: March 29, 2019

Legend



Google earth

© 2018 Google

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Attachment 4

Attachment 4

Photo 1 of 5

Description: Trash fences installed at the active phase of the landfill.

Direction: Looking east



Photo 2 of 5

Description: Development of a new landfill cell adjacent to the active phase.

Direction: Looking northwest



Photo 3 of 5

Description: Another view of the development of a new landfill cell adjacent to the active phase.

Direction: Looking north



Photo 4 of 5

Description: The north stormwater ditch flowing into the stormwater settling pond before flowing off-site through Outfall 001. The water was a light brown color.

Direction: Looking south



Photo 5 of 5

Description: View of Outfall 001. The water flowing through Outfall 001 was predominately clear, but it did contain a brownish tint.

Direction: Looking west



Attachment 5

the 1990s, the number of people with a diagnosis of schizophrenia has increased in many countries, including the United Kingdom (Murray & Lewis, 1998). The prevalence of schizophrenia is estimated to be 1% of the population (Murray & Lewis, 1998).

There is a growing awareness of the need to improve the lives of people with schizophrenia. The World Health Organization (WHO) has developed a strategy for the care of people with schizophrenia, which emphasizes the importance of providing a range of services, including housing, education, and employment (WHO, 1993). The WHO strategy also emphasizes the importance of involving people with schizophrenia in the development and evaluation of services.

In the United Kingdom, the Department of Health has developed a strategy for the care of people with schizophrenia, which emphasizes the importance of providing a range of services, including housing, education, and employment (Department of Health, 1998). The Department of Health strategy also emphasizes the importance of involving people with schizophrenia in the development and evaluation of services.

The purpose of this paper is to describe the development and evaluation of a self-help manual for people with schizophrenia.

2. BACKGROUND

The self-help manual was developed as part of a larger project to improve the lives of people with schizophrenia. The project was funded by the Department of Health and the National Institute for Research in Schizophrenia and Related Disorders. The project was led by the first author, who is a senior lecturer in the Department of Psychiatry, University of Manchester. The project also involved a number of other researchers, including a psychologist, a social worker, and a nurse.

The self-help manual was developed in response to the needs of people with schizophrenia. It was designed to provide information and advice on a range of issues, including:

- understanding schizophrenia
- managing symptoms
- taking medication
- coping with stress
- improving relationships
- finding a job
- finding a home
- accessing services

The self-help manual was developed using a participatory approach. People with schizophrenia were involved in the development of the manual from the beginning to the end.

The self-help manual was evaluated using a randomized controlled trial. The trial compared the self-help manual with a control group.

The results of the trial showed that the self-help manual was effective in improving the lives of people with schizophrenia.

The self-help manual is now available to people with schizophrenia in the United Kingdom.

Laboratory Analysis Report

Total Number of Pages: 9

Job ID : 19031883



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
W006908

Report To : Client Name: TCEQ P.O.#.:
Attn: Trey Thumann Sample Collected By: Trey Thumann
Client Address: 5425 Polk Ave Suite H Date Collected: 03/29/19
City, State, Zip: Houston, Texas, 77023-1483

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
W006908-01	Liquid	19031883.01

Shantall Carpenter

Released By: Shantall Carpenter
Title: Senior Project Manager
Date: 4/5/2019



This Laboratory is NELAP (T104704213-19-19) accredited. Effective: 04/01/2019; Expires: 3/31/2020

Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Soil samples are reported on a wet weight basis unless otherwise noted. Uncertainty estimates are available on request.

Date Received : 03/29/2019 12:29

LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID : 19031883

Date: 4/5/2019

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count
J	Estimation. Below calibration range but above MDL		

Qualifier Definition



LABORATORY TEST RESULTS

Job ID : 19031883

Date 4/5/2019

Client Name: TCEQ

Attn: Trey Thumann

Project Name: W006908

Client Sample ID: W006908-01

Job Sample ID: 19031883.01

Date Collected: 03/29/19

Sample Matrix Liquid

Time Collected: 10:28

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
EPA 200.7	Total Recoverable Metals								
	Arsenic	BRL	mg/L	1	0.01			04/02/19 18:45	BRR
	Barium	0.216	mg/L	1	0.01			04/02/19 18:45	BRR
	Cadmium	BRL	mg/L	1	0.01			04/02/19 18:45	BRR
	Chromium	BRL	mg/L	1	0.01			04/02/19 18:45	BRR
	Copper	BRL	mg/L	1	0.01			04/02/19 18:45	BRR
	Iron	0.806	mg/L	1	0.01			04/02/19 18:45	BRR
	Lead	BRL	mg/L	1	0.01			04/02/19 18:45	BRR
	Manganese	0.045	mg/L	1	0.01			04/02/19 18:45	BRR
	Nickel	BRL	mg/L	1	0.01			04/02/19 18:45	BRR
	Selenium	BRL	mg/L	1	0.01			04/02/19 18:45	BRR
	Silver	BRL	mg/L	1	0.01			04/02/19 18:45	BRR
	Zinc	0.060	mg/L	1	0.01			04/02/19 18:45	BRR
EPA 245.1	Total Metals - Mercury								
	Mercury	BRL	mg/L	1	0.0002			04/01/19 12:23	LR
SM 2540D	Total Suspended Solids								
	TSS	30.1	mg/L	1	2.50			04/01/19 15:00	CO

QUALITY CONTROL CERTIFICATE



Job ID : 19031883

Date : 4/5/2019

Analysis : Total Metals - Mercury

Method : EPA 245.1

Reporting Units : mg/L

QC Batch ID : Qb19040156

Created Date : 04/01/19

Created By : LRapushi

Samples in This QC Batch : 19031883.01

Digestion :

PB19040138

Prep Method : EPA 245.1

Prep Date : 04/01/19 09:00

Prep By : LRapushi

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Mercury	7439-97-6	BRL	mg/L	1	0.0002	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Mercury	0.005	0.00559	112	0.005	0.00545	109	2.5	20	82-115	

QC Type: MS and MSD

QC Sample ID: 19031755.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Mercury	BRL	0.005	0.00511	102						82-115	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 19031883

Date : 4/5/2019

Analysis : Total Suspended Solids **Method :** SM 2540D **Reporting Units :** mg/L

QC Batch ID : Qb19040184 **Created Date :** 04/01/19 **Created By :** CObuekwe

Samples in This QC Batch : 19031883.01

Sample Preparation : PB19040148 **Prep Method :** SM 2540D **Prep Date :** 04/01/19 14:53 **Prep By :** CObuekwe

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
TSS		BRL	mg/L	1	2.50	

QC Type: Duplicate

QC Sample ID: 19031880.04

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
TSS	2.1	2.3	mg/L	9.1	20	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
TSS	500	504.0	101						72-108	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 19031883

Date : 4/5/2019

Analysis : Total Recoverable Metals **Method :** EPA 200.7 **Reporting Units :** mg/L

QC Batch ID : Qb19040312 **Created Date :** 04/02/19 **Created By :** BRena

Samples in This QC Batch : 19031883.01

Digestion : PB19040223 **Prep Method :** EPA 200.7 **Prep Date :** 04/02/19 08:45 **Prep By :** Mwisman

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Arsenic	7440-38-2	BRL	mg/L	1	0.01	
Barium	7440-39-3	BRL	mg/L	1	0.01	
Cadmium	7440-43-9	BRL	mg/L	1	0.01	
Chromium	7440-47-3	BRL	mg/L	1	0.01	
Copper	7440-50-8	BRL	mg/L	1	0.01	
Iron	7439-89-6	BRL	mg/L	1	0.01	
Lead	7439-92-1	BRL	mg/L	1	0.01	
Manganese	7439-95-5	BRL	mg/L	1	0.01	
Nickel	7440-02-0	BRL	mg/L	1	0.01	
Selenium	7782-49-2	BRL	mg/L	1	0.01	
Silver	7440-22-4	BRL	mg/l	1	0.01	
Zinc	7440-66-6	BRL	mg/L	1	0.01	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Arsenic	1	0.997	99.7	1	0.992	99.2	0.5	20	85-115	
Barium	1	0.990	99	1	0.995	99.5	0.5	20	85-115	
Cadmium	1	0.992	99.2	1	0.984	98.4	0.8	20	85-115	
Chromium	1	1.030	103	1	1.020	102	0.6	20	85-115	
Copper	1	1.030	103	1	1.030	103	0.3	20	85-115	
Iron	1	0.968	96.8	1	0.962	96.2	0.6	20	85-115	
Lead	1	1.000	100	1	1.000	100	0.5	20	85-115	
Manganese	1	0.996	99.6	1	0.992	99.2	0.4	20	85-115	
Nickel	1	1.020	102	1	1.010	101	0.9	20	85-115	
Selenium	1	1.030	103	1	1.030	103	0.4	20	85-115	
Silver	1	0.984	98.4	1	0.979	97.9	0.5	20	85-115	
Zinc	1	0.932	93.2	1	0.929	92.9	0.3	20	85-115	

QC Type: MS and MSD

QC Sample ID: 19040032.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Arsenic	BRL	1	1.040	104						75-125	
Barium	0.083	1	1.080	99.6						75-125	
Cadmium	BRL	1	1.020	102						75-125	
Chromium	BRL	1	1.020	102						75-125	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 19031883

Date : 4/5/2019

Analysis : Total Recoverable Metals

Method : EPA 200.7

Reporting Units : mg/L

QC Batch ID : Qb19040312 **Created Date :** 04/02/19

Created By : BRena

Samples in This QC Batch : 19031883.01

QC Type: MS and MSD

QC Sample ID: 19040032.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Copper	BRL	1	1.040	104						75-125	
Iron	0.177	1	1.140	96.7						75-125	
Lead	BRL	1	0.965	95.8						75-125	
Manganese	0.014	1	0.992	97.8						75-125	
Nickel	BRL	1	0.979	97.8						75-125	
Selenium	BRL	1	1.070	107						75-125	
Silver	BRL	1	1.000	100						75-125	
Zinc	0.023	1	0.970	94.7						75-125	

Refer to the Definition page for terms.

Chain of Custody Record

W 006908



Send to:
 Houston Laboratory
 Phone: 281-457-5229

Region: _____ Organization #: _____ PCA Code: _____ Program: _____
 Sampler Name: Trey Thumann (print) Sampler Signature: Trey Thumann
 Sampler phone number: 713-767-3521 E-Mail ID: trey.thumann@tceq.texas.gov

LAB USE ONLY	Sample ID	Sampling		Comp	Grab	Matrix <small>L = Liquid S = Solid</small>	No. of Containers	Containers*		Preservatives**		Remarks		
		Date	Time											
	-01	3-29-19	10:28		✓	L	2			P	1		*As, Ba, Cd, Cr, Cu, Pb, Mn, Hg, Ni, Se, Ag, Zn, Fe	
	-02													
	-03													
	-04													
	-05													
	-06													
	-07													
	-08													

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
<u>Trey Thumann</u>	<u>3-29-19</u>	<u>12:29</u>	<u>Amuth</u>	<u>3-29-19</u>	<u>12:29</u>

FOR LAB USE ONLY

Received on Ice: Y N

Temperature: 4.5-0.5-4.0 °C 1707029

Preserved: Y N

COC Seal: Y N

Seals Intact: Y N

Shipper Name: _____ Shipper Number: _____

*Containers: P = Plastic G = Clear Glass A = Amber Glass V = VOA Vials O = Other _____
 **Preservatives: 1 = Ice 2 = H₂SO₄ 3 = HCl 4 = HNO₃ 5 = Na₂S₂O₃ 6 = Other _____



Sample Condition Checklist

A&B JobID : 19031883	Date Received : 03/29/2019	Time Received : 12:29PM																										
Client Name : TCEQ																												
Temperature : 4.5-0.5cf=4.0°C	Sample pH : <2 Metals																											
Thermometer ID : 1707629	pH Paper ID : 72375																											
Check Points																												
1.	Cooler seal present and signed.	Yes	No	N/A																								
2.	Sample(s) in a cooler.	X																										
3.	If yes, ice in cooler.	X																										
4.	Sample(s) received with chain-of-custody.	X																										
5.	C-O-C signed and dated.	X																										
6.	Sample(s) received with signed sample custody seal.		X																									
7.	Sample containers arrived intact. (If no comment).	X																										
8.	<table style="width: 100%; border: none;"> <tr> <td style="width: 10%;">Matrix</td> <td style="width: 10%;">Water</td> <td style="width: 10%;">Soil</td> <td style="width: 10%;">Liquid</td> <td style="width: 10%;">Sludge</td> <td style="width: 10%;">Solid</td> <td style="width: 10%;">Cassette</td> <td style="width: 10%;">Tube</td> <td style="width: 10%;">Bulk</td> <td style="width: 10%;">Badge</td> <td style="width: 10%;">Food</td> <td style="width: 10%;">Other</td> </tr> <tr> <td>:</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other	:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
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9.	Sample(s) were received in appropriate container(s).	X																										
10.	Sample(s) were received with proper preservative	X																										
11.	All samples were logged or labeled.	X																										
12.	Sample ID labels match C-O-C ID's	X																										
13.	Bottle count on C-O-C matches bottles found.	X																										
14.	Sample volume is sufficient for analyses requested.	X																										
15.	Samples were received within the hold time.	X																										
16.	VOA vials completely filled.			X																								
17.	Sample accepted.	X																										
18.	Has client been contacted about sub-out			X																								
Comments : Include actions taken to resolve discrepancies/problem:																												

Received by : AArnett

Check in by/date : JMontemayor /
03/29/2019

