

TCEQ Interoffice Memorandum

To: Mary Smith, General Counsel

Thru: *AS* Amy Settemeyer, Deputy Director
Enforcement Division

From: *MP* Michael Parrish, Agenda Special Assistant
Enforcement Division

Date: November 1, 2024

**Subject: Supplemental Information:
November 6, 2024 Commission Agenda**
Item No. 13 – Space Exploration Technologies Corp.
Docket No. 2024-1282-IWD-E

Enclosed please find the following:

Supplemental Information:

- TCEQ Investigation Report # 1995473 with Attachments

Please do not hesitate to call Michael Parrish at (512) 239-2548 if you have any questions regarding this matter.

cc: Garrett Arthur, Public Interest Counsel
Melissa Schmidt, Public Interest Counsel
Gill Valls, Office of General Counsel
Katherine McKenzie, Agenda Coordinator, Litigation Division
Amy Settemeyer, Deputy Director, Enforcement Division
Melissa Cordell, Assistant Deputy Director, Enforcement Division
Rebecca Margain-Nunez, Executive Assistant, Enforcement Division
Brett Lanham, Manager, Water Section, Enforcement Division
Mistie Gonzales, Enforcement Coordinator, Water Section, Enforcement Division

IWD_05462-000_CP_20240725_Compliance
Comp CG_Cameron_CP_20240725_Investigation
Texas Commission on Environmental Quality
Investigation Report

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Customer: Space Exploration Technologies Corp.
Customer Number: CN602867657

Regulated Entity Name: STARBASE LAUNCH PAD SITE
Regulated Entity Number: RN111606745

Investigation # 1995473

Incident Numbers

417437	413823
413825	409766
417436	419227
414164	425155
413826	413964
409769	413821
413818	409765

Investigator: JONATHAN DIAZ

Site Classification INDUSTRIAL MAJOR

Conducted: 07/25/2024 -- 07/30/2024

SIC Code: 3761

NAIC Code: 336414

Program(s): WASTEWATER

Investigation Type: Compliance Invest File
Review

Location: LOCATED ON S SIDE OF THE EASTERN
TERMINUS OF SH 4 BROWNSVILLE TX 78521

Additional ID(s) WQ0005462000

Address: ,

, ,

Local Unit: REGION 15 - HARLINGEN

Activity Type(s) WWCRR - WW Compliance Record
Review
WWCMPL - WW Complaint

Principal(s):

Role

Name

RESPONDENT

SPACE EXPLORATION TECHNOLOGIES CORP

Contact(s):

STARBASE LAUNCH PAD SITE - BROWNSVILLE**7/25/2024 to 7/30/2024 Inv. # - 1995473****Page 2 of 5**

Role	Title	Name	Phone
NOE CONTACT	MANAGER ENVIRONMENTAL REGULATORY AFFAIRS	MS Katy Groom	Work (321) 730-1469
REGULATED ENTITY CONTACT	MANAGER ENVIRONMENTAL REGULATORY AFFAIRS	MS Katy Groom	Work (321) 730-1469
REGULATED ENTITY CONTACT	SENIOR ENVIRONMENTAL REGULATORY ENGINEER	Carolyn Wood	Cell (323) 537-0071
REGULATED ENTITY MAIL CONTACT	MANAGER ENVIRONMENTAL REGULATORY AFFAIRS	MS Katy Groom	Work (321) 730-1469

Other Staff Member(s):

Role	Name
QA Reviewer	MONICA GALVAN
Investigator	ESMERALDA RODRIGUEZ
Supervisor	MONICA GALVAN
QA Reviewer	ESMERALDA RODRIGUEZ
Supervisor	JAIME GARZA

Associated Check List

<u>Checklist Name</u>	<u>Unit Name</u>
WQ FILE/RECORD REVIEW	SpaceX Launch Pad
WQ COMPLAINT INVESTIGATION	SpaceX Launch Pad

Investigation Comments:**INTRODUCTION**

On August 6, 2023, the Texas Commission on Environmental Quality (TCEQ) Harlingen regional office received a complaint alleging Space Exploration Technologies Corp. Starbase Launch Pad Site ("Facility") was discharging deluge water without TCEQ authorization. In total, the Harlingen region received 14 complaints alleging environmental impacts from the Facility's deluge system (Consolidated Compliance and Enforcement Data Systems (CCEDS) incident nos. 417437, 413823, 413825, 409766, 417436, 419227, 414164, 425155, 413826, 413964, 409769, 413821, 413818, and 409765). These complaints are associated to this investigation. Upon receipt of the initial complaint, the TCEQ Harlingen regional office began coordinating with TCEQ's Office of Water, Water Quality Division, to determine applicability of potential storm water or industrial wastewater permitting requirements. Additionally, the TCEQ actively monitored use of the Facility's deluge system during this time, communicating with the Facility, Office of Water, EPA and complainants.

On July 25, 2024, TCEQ Environmental Investigator, Jonathan Diaz, conducted an in-house compliance record review investigation of the Facility to document the compliance with Industrial Wastewater permitting requirements. The Facility is a private launch site located on the eastern terminus of Boca Chica Boulevard on the south side of State Highway 4 (SH 4), Brownsville (Cameron County), Texas.

STARBASE LAUNCH PAD SITE - BROWNSVILLE

7/25/2024 to 7/30/2024 Inv. # - 1995473

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The Facility operates under Customer Number (CN) 602867657 Space Exploration Technologies Corp. The Facility is associated to pending Industrial Wastewater Individual Permit Authorization Number Water Quality (WQ) WQ0005462000. In addition, this Facility operates under Texas Pollutant Discharge Elimination System (TPDES) Construction Stormwater General Permit (CGP) TXR150000 individual permit authorized under TXR1515PQ and TPDES Multi Sector General Permit (MSGP) TXR050000 individual permit authorized under TXR05GD61. This Facility is a source for some of the criteria pollutants under the provisions of Industrial Wastewater Permitting.

Daily Narrative

In a letter dated July 1, 2024, the TCEQ Water Quality Division, Applications Review and Processing Team, acknowledges the successful completion of the Industrial Wastewater Individual Permit Application for Starbase Launch Pad Site (RN111606745). The application reference number is noted as 664613 and authorization number as WQ0005462000 (Attachment A).

The July 25, 2024 investigation was conducted to determine compliance with the Industrial Wastewater permitting requirements and the pending wastewater permit number WQ0005462000 for the discharge of non-process deluge system water that is utilized during launch operations.

During the investigation conducted for the Facility on July 25, 2024, it was documented that the Respondent failed to obtain authorization to discharge industrial wastewater into or adjacent to any water in the state, in violation of 30 TEX. ADMIN. CODE 305.42(a) and TEX. WATER CODE 26.121(a)(1). Specifically, the Respondent has been operating Starbase Launch Pad Site and discharging industrial wastewater without proper authorization. Industrial wastewater was discharged without a TPDES permit on March 14, 2024, April 5, 2024, May 8, 2024, and July 26, 2024. On March 13, 2024 EPA Region 6 issued an Administrative Order, Docket Number: CWA-06-2024-174, that captured the discharges up to March 13, 2024 (Attachment B).

Exit Interview

No exit interview was conducted during this investigation.

GENERAL FACILITY AND PROCESS INFORMATION

Space Exploration Technologies Corp. operates Starbase Launch Pad Site, a private launch site with a water deflector system. The Industrial Wastewater Individual Permit Authorization was obtained to discharge non-process deluge system water that is utilized during launch operations. Discharges from the Facility are expected to contain total dissolved solids, nitrate-nitrogen, phosphorus, total dissolved solids, sulfate, chloride, fluoride, aluminum, cadmium, chromium, copper, cyanide, and zinc. Wastewater will be treated by reusing deluge and pretreatment when required.

Starbase Launch Pad Site serves as a site for rocket launch activity of SpaceX Starship-Super Heavy launch vehicle. Discharge water will consist of minor amounts of deluge water not captured by the containment area during vehicle launch activities, deluge water captured by the containment area in retention pond and stormwater (Attachment A).

BACKGROUND

Starbase Launch Pad Site is identified in the TCEQ Central Registry as Regulated Entity Number RN111606745 and is owned and operated by Space Exploration Technologies Corp. which is identified as Customer Reference Number CN602867657. The regulated entity has a performance classification of "Unclassified" and a compliance history rating of "o". The customer has a performance classification of "Satisfactory" and a compliance history rating of "o.40". Based on the file review, the compliance status of the facility was determined as specified below:

Current Enforcement Actions

Based on the information provided, the Facility is in violation of the provisions of 30 TEX. ADMIN. CODE 305.42(a) and TEX. WATER CODE 26.121(a)(1). The violation has been described in the Violation Detail Section of this report.

Agreed Orders, Court Orders, and Other Compliance Agreements

Additional information can be obtained from the Compliance History Report (Attachment C). There are no Court Orders or compliance agreements for this CN.

Complaints

There has been one Air Quality complaint in the past five years.

Including this investigation, there have been fourteen water quality complaints against this facility.

Prior Enforcement Issues

Refer to the Compliance History Report (Attachment C).

ADDITIONAL INFORMATION

Conclusions and Recommendations

The regulated entity submitted a New Industrial Wastewater Individual Permit Application on July 1, 2024.

During the course of the investigation, the complainant was provided a copy of our complaint policies and procedures by referring them to the TCEQ's complaint website <https://www.tceq.texas.gov/compliance/complaints>.

A Notice of Enforcement (NOE) letter will be submitted to the entity for the violation described in this report.

Additional issues

No additional issues were discovered during this investigation.

NOE Date: 8/2/2024

**OUTSTANDING ALLEGED VIOLATION(S)
ASSOCIATED TO A NOTICE OF ENFORCEMENT**

Track Number: 887204 **Compliance Due Date:** To Be Determined
Violation Start Date: 6/26/2023

2D TWC Chapter 26.121(a)(1)
30 TAC Chapter 305.42(a)

Alleged Violation:

Investigation: 1995473

Comment Date: 08/01/2024

During a record review investigation conducted on July 25, 2024, it was documented that the Respondent failed to obtain authorization to discharge industrial wastewater into or adjacent to any water in the state, in violation of 30 TEX. ADMIN. CODE § 305.42(a) and TEX. WATER CODE § 26.121(a)(1).

STARBASE LAUNCH PAD SITE - BROWNSVILLE

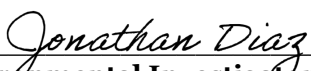
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Specifically, the Respondent has been operating Starbase Launch Pad Site and discharging industrial wastewater without proper authorization. Industrial wastewater was discharged without a TPDES permit on March 14, 2024, April 5, 2024, May 8, 2024, and July 26, 2024. On March 13, 2024 E.P.A. Region 6 issued an Administrative Order, Docket Number: CWA-06-2024-174, that captured the discharges up to March 13, 2024.

Recommended Corrective Action: The Facility shall submit an individual permit application to the TCEQ Water Quality Division in order to obtain authorization to discharge industrial wastewater into or adjacent to waters in the state.

Signed


Environmental Investigator

Date 08/02/2024

Signed


Supervisor

Date 8/2/2024

Attachments: (in order of final report submittal)

☒ Enforcement Action Request (EAR)

☒ Letter to Facility (specify type) : Notice of Enforcement

Investigation Report

☐ Sample Analysis Results

☐ Manifests

☐ Notice of Registration

☐ Maps, Plans, Sketches

☐ Photographs

☐ Correspondence from the facility

☒ Other (specify) :

Attachments

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



ATTACHMENT A

Entity Name: Starbase Launch Pad Site

Investigation No.: 1995473

WQ Permit Application
Confirmation of Submission

Jon Niermann, *Chairman*
Bobby Janecka, *Commissioner*
Catarina R. Gonzales, *Commissioner*
Kelly Keel, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 1, 2024

Dear Applicant:

Re: Confirmation of Submission of the New Industrial Wastewater Individual Permit Application

This is an acknowledgement that you have successfully completed Industrial Wastewater Individual Permit Application.

ER Account Number: ER106371
Application Reference Number: 664613
Authorization Number: WQ0005462000
Site Name: Starbase Launch Pad Site
Regulated Entity: RN111606745 - STARBASE LAUNCH PAD SITE
Customer(s): CN602867657 - Space Exploration Technologies Corp.

Please be aware that TCEQ staff may contact your designated contact for any additional information.

If you have any questions, you may contact the Applications Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by telephone at (512) 239-4671.

Sincerely,
Applications Review and Processing Team
Water Quality Division

Texas Commission on Environmental Quality

New Domestic or Industrial Individual Permit

Site Information (Regulated Entity)

What is the name of the site to be authorized?	Starbase Launch Pad Site
Does the site have a physical address?	No
Because there is no physical address, describe how to locate this site:	Located on S side of the eastern terminus of SH 4
City	Brownsville
State	TX
ZIP	78521
County	CAMERON
Latitude (N) (##.#####)	25.996969
Longitude (W) (-###.#####)	-97.156269
Primary SIC Code	
Secondary SIC Code	
Primary NAICS Code	
Secondary NAICS Code	

Regulated Entity Site Information

What is the Regulated Entity's Number (RN)?	RN111606745
What is the name of the Regulated Entity (RE)?	STARBASE LAUNCH PAD SITE
Does the RE site have a physical address?	No
Because there is no physical address, describe how to locate this site:	LOCATED ON S SIDE OF THE EASTERN TERMINUS OF SH 4 BROWNSVILLE TX 78521
City	BROWNSVILLE
State	TX
ZIP	78521
County	CAMERON
Latitude (N) (##.#####)	
Longitude (W) (-###.#####)	
Facility NAICS Code	336414
What is the primary business of this entity?	

Space E-Customer (Applicant) Information (Owner Operator)

How is this applicant associated with this site?	Owner Operator
What is the applicant's Customer Number (CN)?	CN602867657
Type of Customer	Corporation
Full legal name of the applicant:	
Legal Name	Space Exploration Technologies Corp.
Texas SOS Filing Number	805421124
Federal Tax ID	10627671
State Franchise Tax ID	10106276719
State Sales Tax ID	
Local Tax ID	
DUNS Number	120406462
Number of Employees	

Independently Owned and Operated?

Yes

I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas.

Yes

Responsible Authority Contact

Organization Name

Space Exploration Technologies Corp.

Prefix

First

Katy

Middle

Last

Groom

Suffix

Credentials

Title

Manager, Environmental Regulatory
Affairs

Responsible Authority Mailing Address

Enter new address or copy one from list:

Address Type

Domestic

Mailing Address (include Suite or Bldg. here, if applicable)

1 ROCKET RD

Routing (such as Mail Code, Dept., or Attn:)

City

BROWNSVILLE

State

TX

ZIP

78521

Phone (###-###-####)

3217301469

Extension

1469

Alternate Phone (###-###-####)

Fax (###-###-####)

E-mail

Katy.Groom@spacex.com

Billing Contact

Responsible contact for receiving billing statements:

Select the permittee that is responsible for payment of the annual fee.

CN602867657, Space Exploration
Technologies Corp.

Organization Name

Space Exploration Technologies Corp.

Prefix

First

Katy

Middle

Last

Groom

Suffix

Credentials

Title

Manager, Environmental Regulatory
Affairs

Enter new address or copy one from list:

Mailing Address

Address Type

Domestic

Mailing Address (include Suite or Bldg. here, if applicable)

1 ROCKET RD

Routing (such as Mail Code, Dept., or Attn:)

City

BROWNSVILLE

State

TX

ZIP

78521

Phone (###-###-####)

3217301469

Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	katy.groom@spacex.com

Application Contact

Person TCEQ should contact for questions about this application:

Same as another contact?	Billing Contact
Organization Name	Space Exploration Technologies Corp.
Prefix	
First	Katy
Middle	
Last	Groom
Suffix	
Credentials	
Title	Manager, Environmental Regulatory Affairs

Enter new address or copy one from list:

Mailing Address

Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	1 ROCKET RD
Routing (such as Mail Code, Dept., or Attn:)	
City	BROWNSVILLE
State	TX
ZIP	78521
Phone (###-###-####)	3217301469
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	katy.groom@spacex.com

Technical Contact

Person TCEQ should contact for questions about this application:

Same as another contact?	Application Contact
Organization Name	Space Exploration Technologies Corp.
Prefix	MRS
First	Carolyn
Middle	
Last	Wood
Suffix	
Credentials	
Title	Sr Environmental Regulatory Engineer
Enter new address or copy one from list:	Application Contact Address
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	1 ROCKET RD
Routing (such as Mail Code, Dept., or Attn:)	

City	BROWNSVILLE
State	TX
ZIP	78521
Phone (###-###-####)	3235370071
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	carolyn.wood@spacex.com

DMR Contact

Person responsible for submitting Discharge Monitoring Report Forms:

Same as another contact?	Technical Contact
Organization Name	Space Exploration Technologies Corp.
Prefix	MRS
First	Carolyn
Middle	
Last	Wood
Suffix	
Credentials	
Title	Sr Environmental Regulatory Engineer
Enter new address or copy one from list:	
Mailing Address:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	1 ROCKET RD
Routing (such as Mail Code, Dept., or Attn:)	
City	BROWNSVILLE
State	TX
ZIP	78521
Phone (###-###-####)	3235370071
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	carolyn.wood@spacex.com

Section 1# Permit Contact

Permit Contact#: 1

Person TCEQ should contact throughout the permit term.

1) Same as another contact?	Application Contact
2) Organization Name	Space Exploration Technologies Corp.
3) Prefix	MRS
4) First	Katy
5) Middle	
6) Last	Groom
7) Suffix	
8) Credentials	

9) Title

Manager, Environmental Regulatory
Affairs

Mailing Address

10) Enter new address or copy one from list

11) Address Type

Domestic

11.1) Mailing Address (include Suite or Bldg. here, if applicable)

1 ROCKET RD

11.2) Routing (such as Mail Code, Dept., or Attn:)

11.3) City

BROWNSVILLE

11.4) State

TX

11.5) ZIP

78521

12) Phone (###-###-####)

3217301469

13) Extension

14) Alternate Phone (###-###-####)

15) Fax (###-###-####)

16) E-mail

katy.groom@spacex.com

Public Notice Information

Individual Publishing the Notices

1) Prefix

MRS

2) First and Last Name

Carolyn Wood

3) Credential

4) Title

Sr Environmental Regulatory Engineer

5) Organization Name

Space Exploration Technologies Corp

6) Mailing Address

1 ROCKET RD

7) Address Line 2

8) City

BROWNSVILLE

9) State

TX

10) Zip Code

78521

11) Phone (###-###-####)

3235370071

12) Extension

13) Fax (###-###-####)

14) Email

carolyn.wood@spacex.com

Contact person to be listed in the Notices

15) Prefix

MRS

16) First and Last Name

Katy Groom

17) Credential

18) Title

Manager, Environmental Regulatory
Affairs

19) Organization Name

Space Exploration Technologies Corp

20) Phone (###-###-####)

3217301469

21) Fax (###-###-####)

22) Email

katy.groom@spacex.com

Bilingual Notice Requirements

23) Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?

Yes

23.1) Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?

Yes

23.2) Do the students at these schools attend a bilingual education

No

program at another location?

23.3) Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC 89.1205(g)?

No

23.4) Which language is required by the bilingual program?

Spanish

Section 1# Public Viewing Information

County#: 1

1) County

CAMERON

2) Public building name

Port Isabel Public Library

3) Location within the building

Circulation Desk

4) Physical Address of Building

213 N Yturria St

5) City

Port Isabel

6) Contact Name

7) Phone (###-###-####)

9569431822

8) Extension

9) Is the location open to the public?

Yes

Owner Information

Owner of Treatment Facility

1) Prefix

2) First and Last Name

3) Organization Name

Space Exploration Technologies Corp

4) Mailing Address

1 Rocket Rd

5) City

Brownsville

6) State

TX

7) Zip Code

78521

8) Phone (###-###-####)

3217301469

9) Extension

10) Email

katy.groom@spacex.com

11) What is ownership of the treatment facility?

Private

Owner of Land (where treatment facility is or will be)

12) Prefix

13) First and Last Name

14) Organization Name

Space Exploration Technologies Corp

15) Mailing Address

1 Rocket Rd

16) City

Brownsville

17) State

TX

18) Zip Code

78521

19) Phone (###-###-####)

3237301469

20) Extension

21) Email

katy.groom@spacex.com

22) Is the landowner the same person as the facility owner or co-applicant?

Yes

Admin General Information

1) Is the facility located on or does the treated effluent cross American Indian Land?	No
2) What is the authorization type that you are seeking?	Industrial Wastewater
2.1) Are the discharges at your facility subjected to federal effluent limitation guidelines (ELG) 40 CFR Part 400-471?	No
3) What is your facility operational status?	Active
3.1) What is your facility operational start date?	04/20/2023
4) What is the classification for your authorization?	TPDES
4.1) City nearest the outfall(s):	Brownsville
4.2) County where the outfalls are located:	CAMERON
4.3) Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?	No
4.4) Is the daily average discharge at your facility of 5 MGD or more?	No
5) Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?	Yes
5.1) List each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application:	Carolyn A Wood

Plain Language

1) Plain Language	
[File Properties]	
File Name	LANG_Pages from DRAFT FINAL IP Signed.pdf
Hash	7D7468C73AA4AFE1F365CF8B19F31B8E3DA22D561B99E41F7478E650ADDFB55A
MIME-Type	application/pdf

Supplemental Permit Information Form

1) Supplemental Permit Information Form (SPIF)	
[File Properties]	
File Name	SPIF_SPIF combo.pdf
Hash	407D1249E6110F0D93B6B7C461F22BCE73A245C6957E07BCC1DAAD689BB7F152
MIME-Type	application/pdf

Industrial Attachments

1) Have you clearly outlined and labeled the required information on the original full size USGS Topographic Map?	Yes
1.1) I certify that I have clearly outlined and labeled the required information on the Topographic map and attached here.	
[File Properties]	
File Name	MAP_SpaceX_TPDES Permit_Map 1- USGS TOPO.pdf
Hash	072129C468D8EA0E1D84C3271580EF7782A9ED31F0C3FCC4D18BD351FFBBDC61
MIME-Type	application/pdf
2) Public Involvement Plan (TCEQ Form 20960)	
[File Properties]	
File Name	PIP_DRAFT IP Attachments v2.pdf
Hash	226853540E6594FCA63D13F1C9914D9CBC8EF1D1456B91CD2F95A5F82FF581FF

MIME-Type	application/pdf
3) Administrative Report 1.1	
[File Properties]	
File Name	ARPT_FINAL IP Signed 2024.pdf
Hash	7FCE78C8EF16AE034F0169F8B7F5C3D6D3DDD8DE10C0EB5DE68BEF0930B7CBE8
MIME-Type	application/pdf
4) I confirm that all required sections of Technical Report 1.0 are complete and will be included in the Technical Attachment.	Yes
4.1) I confirm that Worksheet 2.0 (Pollutant Analyses Requirements) is complete and included in the Technical Attachment.	Yes
4.2) I confirm that Worksheet 4.0 (Receiving Waters) is complete and included in the Technical Attachment.	Yes
4.3) Are you planning to include Worksheet 4.1 (Waterbody Physical Characteristics) in the Technical Attachment?	No
4.4) Are you planning to include Worksheet 6.0 (Industrial Waste Contribution) in the Technical Attachment?	Yes
4.5) Are you planning to include Worksheet 7.0 (Stormwater Discharges Associated with Industrial Activities) to the Technical Attachment?	Yes
4.6) Are you planning to include Worksheet 8.0 (Aquaculture) in the Technical Attachment?	No
4.7) Are you planning to include Worksheet 9.0 (Class V Injection Well Inventory/Authorization) in the Technical Attachment?	No
4.8) Are you planning to include Worksheet 10.0 (Quarries in the John Graves Scenic Riverway) in the Technical Attachment?	No
4.9) Are you planning to include Worksheet 11.0 (Cooling Water System Information) in the Technical Attachment?	No
4.10) Are you planning to include Worksheet 11.1 (Impingement Mortality) in the Technical Attachment?	No
4.11) Are you planning to include Worksheet 11.2 (Source Water Biological Data) in the Technical Attachment?	No
4.12) Are you planning to include Worksheet 11.3 (Entrainment) in the Technical Attachment?	No
4.13) Technical Attachment	
[File Properties]	
File Name	TECH_FINAL IP Signed 2024.pdf
Hash	7FCE78C8EF16AE034F0169F8B7F5C3D6D3DDD8DE10C0EB5DE68BEF0930B7CBE8
MIME-Type	application/pdf
5) Affected Landowners Map	
[File Properties]	
File Name	LANDMP_SpaceX_TPDES Permit_Map 2 - Landowner Map.pdf
Hash	5BCD00DAA095B5B1F0D01181136A17D8E0476905AF8862C9B82028E8E5E20F44
MIME-Type	application/pdf
6) Landowners Cross Reference List	
[File Properties]	
File Name	LANDCRL_Affected Party List.pdf
Hash	100AAC12B94A995050BDDE220EBA9FA430A7B85535827512C19CE80FFF318AAB
MIME-Type	application/pdf
7) Landowner Avery Template	

[File Properties]

File Name	LANDAT_Avery5160EasyPeelAddressLabels.doc
Hash	29CD3F0EA94F0A1FB39280EEF16A5005E0375750ED7BBD853D793885B3B4456F
MIME-Type	application/msword

8) Flow Diagram

[File Properties]

File Name	FLDIA_SpaceX_TPDES Permit_Map 1- USGS TOPO.pdf
Hash	072129C468D8EA0E1D84C3271580EF7782A9ED31F0C3FCC4D18BD351FFBBDC61
MIME-Type	application/pdf

9) Site Drawing

[File Properties]

File Name	SITEDR_SpaceX_TPDES Permit_Map 4 - Site Map.pdf
Hash	E48DC6C898CCACC9D21A5123FC85B4B1D67896F7C6BB457CB00C4E16A5350B12
MIME-Type	application/pdf

10) Original Photographs

[File Properties]

File Name	ORIGPH_SpaceX_TPDES Permit_Map 3 - Facility Map.pdf
Hash	BF6128304AE84E730CC062E09267CBF70597085E18C27FBF5ECF622C2D9F3757
MIME-Type	application/pdf

11) Design Calculations

12) Solids Management Plan

13) Water Balance

[File Properties]

File Name	WB_Water Balance Combo.pdf
Hash	F85BD581FC00365210EADFAA75F0F63C76704A6654AC4A35B2F9ABCE9A7759F5
MIME-Type	application/pdf

14) Other Attachments

Certification

I certify that I am authorized under 30 Texas Administrative Code 305.44 to sign this document and can provide documentation in proof of such authorization upon request.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

1. I am Carolyn A Wood, the owner of the STEERS account ER106371.
2. I have the authority to sign this data on behalf of the applicant named above.
3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.

7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing New Domestic or Industrial Individual Permit.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEQ.

OWNER OPERATOR Signature: Carolyn A Wood OWNER OPERATOR

Customer Number:	CN602867657
Legal Name:	Space Exploration Technologies Corp.
Account Number:	ER106371
Signature IP Address:	192.31.242.194
Signature Date:	2024-07-01
Signature Hash:	95D97509F05004B8A56D9B009CEFBFF28CEF2B13F553435AB98305B42165EAEA
Form Hash Code at time of Signature:	47E4427E6115FAC39BDA24087DA1C5C48851191511AC847534A1D642DBAAFE71

Fee Payment

Transaction by:	The application fee payment transaction was made by SHIRLEY YANG
Paid by:	The application fee was paid by SHIRLEY YANG
Fee Amount:	\$300.00
Paid Date:	The application fee was paid on 2024-06-27
Transaction/Voucher number:	The transaction number is 582EA000615822 and the voucher number is 711240

Submission

Reference Number:	The application reference number is 664613
Submitted by:	The application was submitted by ER106371/Carolyn A Wood
Submitted Timestamp:	The application was submitted on 2024-07-01 at 15:49:25 CDT
Submitted From:	The application was submitted from IP address 192.31.242.194
Confirmation Number:	The confirmation number is 548895
Steers Version:	The STEERS version is 6.78

Additional Information

Application Creator: This account was created by Carolyn A Wood



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INDUSTRIAL WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the industrial wastewater permit application.

APPLICANT NAME: Space Exploration Technologies Corp.

PERMIT NUMBER (If new, leave blank): WQ00 [Click to enter text.](#)

Indicate if each of the following items is included in your application.

	Y	N		Y	N
Administrative Report 1.0	☒	☐	Worksheet 8.0	☒	☐
Administrative Report 1.1	☒	☐	Worksheet 9.0	☒	☐
SPIF	☒	☐	Worksheet 10.0	☒	☐
Core Data Form	☒	☐	Worksheet 11.0	☒	☐
Public Involvement Plan Form	☒	☐	Worksheet 11.1	☒	☐
Plain Language Summary	☒	☐	Worksheet 11.2	☒	☐
Technical Report 1.0	☒	☐	Worksheet 11.3	☒	☐
Worksheet 1.0	☒	☐	Original USGS Map	☒	☐
Worksheet 2.0	☒	☐	Affected Landowners Map	☒	☐
Worksheet 3.0	☒	☐	Landowner Disk or Labels	☒	☐
Worksheet 3.1	☒	☐	Flow Diagram	☒	☐
Worksheet 3.2	☒	☐	Site Drawing	☒	☐
Worksheet 3.3	☒	☐	Original Photographs	☒	☐
Worksheet 4.0	☒	☐	Design Calculations	☒	☐
Worksheet 4.1	☒	☐	Solids Management Plan	☐	☒
Worksheet 5.0	☒	☐	Water Balance	☒	☐
Worksheet 6.0	☒	☐			
Worksheet 7.0	☒	☐			

For TCEQ Use Only

Segment Number _____ County _____
Expiration Date _____ Region _____
Permit Number _____



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INDUSTRIAL WASTEWATER PERMIT APPLICATION

ADMINISTRATIVE REPORT 1.0

This report is required for all applications for TPDES permits and TLAPs, except applications for oil and gas extraction operations subject to 40 CFR Part 435. Contact the Applications Review and Processing Team at 512-239-4671 with any questions about completing this report.

Applications for oil and gas extraction operations subject to 40 CFR Part 435 must use the Oil and Gas Exploration and Production Administrative Report ([TCEQ Form-20893 and 20893-inst¹](#)).

Item 1. Application Information and Fees (Instructions, Page 26)

- a. Complete each field with the requested information, if applicable.

Applicant Name: Space Exploration Technologies Corp.

Permit No.: WQ000[Click to enter text.](#)

EPA ID No.: TX0[Click to enter text.](#)

Expiration Date: [Click to enter text.](#)

- b. Check the box next to the appropriate authorization type.

☒ Industrial Wastewater (wastewater and stormwater)

☐ Industrial Stormwater (stormwater only)

- c. Check the box next to the appropriate facility status.

☒ Active

☐ Inactive

- d. Check the box next to the appropriate permit type.

☒ TPDES Permit

☐ TLAP

☐ TPDES with TLAP component

- e. Check the box next to the appropriate application type.

☒ New

☐ Renewal with changes

☐ Renewal without changes

☐ Major amendment with renewal

☐ Major amendment without renewal

☐ Minor amendment without renewal

☐ Minor modification without renewal

- f. If applying for an amendment or modification, describe the request: [Click to enter text.](#)

For TCEQ Use Only

Segment Number _____ County _____

Expiration Date _____ Region _____

Permit Number _____

¹ https://www.tceq.texas.gov/publications/search_forms.html

g. Application Fee

EPA Classification	New	Major Amend. (with or without renewal)	Renewal (with or without changes)	Minor Amend. / Minor Mod. (without renewal)
Minor facility not subject to EPA categorical effluent guidelines (40 CFR Parts 400-471)	☒ \$350	☐ \$350	☐ \$315	☐ \$150
Minor facility subject to EPA categorical effluent guidelines (40 CFR Parts 400-471)	☐ \$1,250	☐ \$1,250	☐ \$1,215	☐ \$150
Major facility	N/A ²	☐ \$2,050	☐ \$2,015	☐ \$450

h. Payment Information

Mailed

Check or money order No.: [Click to enter text.](#)

Check or money order amt.: [Click to enter text.](#)

Named printed on check or money order: [Click to enter text.](#)

Epay

Voucher number: 711240

Copy of voucher attachment: Attached Copy of Voucher Receipt

Item 2. Applicant Information (Instructions, Pages 26)

a. Customer Number, if applicant is an existing customer: CNCN602867657

Note: Locate the customer number using the [TCEQ's Central Registry Customer Search](#)³.

b. Legal name of the entity (applicant) applying for this permit: Space Exploration Technologies Corp

Note: The owner of the facility must apply for the permit. The legal name must be spelled exactly as filed with the TX SOS, Texas Comptroller of Public Accounts, County, or in the legal documents forming the entity.

c. Name and title of the person signing the application. (**Note:** The person must be an executive official that meets signatory requirements in 30 TAC § 305.44.)

Prefix: [Click to enter text.](#)

Full Name (Last/First Name): [Click to enter text.](#)

Title: [Click to enter text.](#)

Credential: [Click to enter text.](#)

d. Will the applicant have overall financial responsibility for the facility?

² All facilities are designated as minors until formally classified as a major by EPA.

³ <https://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch>

☒ Yes ☐ No

Note: The entity with overall financial responsibility for the facility must apply as a co-applicant, if not the facility owner.

Item 3. Co-applicant Information (Instructions, Page 27)

☒ Check this box if there is no co-applicant.; otherwise, complete the below questions.

a. Legal name of the entity (co-applicant) applying for this permit: [Click to enter text.](#)

Note: The legal name must be spelled exactly as filed with the TX SOS, Texas Comptroller of Public Accounts, County, or in the legal documents forming the entity.

b. Customer Number (if applicant is an existing customer): [Click to enter text.](#)

Note: Locate the customer number using the TCEQ's Central Registry Customer Search.

c. Name and title of the person signing the application. (**Note:** The person must be an executive official that meets signatory requirements in 30 TAC § 305.44.)

Prefix: [Click to enter text.](#)

Full Name (Last/First Name): [Click to enter text.](#)

Title: [Click to enter text.](#)

Credential: [Click to enter text.](#)

d. Will the co-applicant have overall financial responsibility for the facility?

☐ Yes ☐ No

Note: The entity with overall financial responsibility for the facility must apply as a co-applicant, if not the facility owner.

Item 4. Core Data Form (Instructions, Pages 27)

a. Complete one Core Data Form (TCEQ Form 10400) for each customer (applicant and co-applicant(s)) and include as an attachment. If the customer type selected on the Core Data Form is Individual, complete Attachment 1 of the Administrative Report. Attachment: A

Item 5. Application Contact Information (Instructions, Page 27)

Provide names of two individuals who can be contact for additional information about this application. Indicate if the individual can be contact about administrative or technical information, or both.

a. ☐ Administrative Contact ☒ Technical Contact

Prefix: Mrs. Full Name (Last/First Name): Wood/Carolyn

Title: Sr Environmental Regulatory Engineer Credential: [Click to enter text.](#)

Organization Name: SpaceX

Mailing Address: 1 Rocket Rd.

City/State/Zip: Brownsville/TX/78521

Phone No: (323) 537-001

Email: carolyn.wood@spacex.com

b. ☒ Administrative Contact ☐ Technical Contact

Prefix: Mrs. Full Name (Last/First Name): Groom/Katy

Title: Manager, Environmental Regulatory Affairs Credential: [Click to enter text.](#)

Organization Name: SpaceX

Mailing Address: L6-1581 Roberts Rd.
Center/FL/32815

City/State/Zip: Kennedy Space

Phone No: (321) 730-1469

Email: katy.groom@spacex.com

Attachment: Click to enter text.

Item 6. Permit Contact Information (Instructions, Page 28)

Provide two names of individuals that can be contacted throughout the permit term.

a. Prefix: Mrs. Full Name (Last/First Name): Groom/Katy

Title: Manager, Environmental Regulatory Affairs Credential: Click to enter text.

Organization Name: SpaceX

Mailing Address: L6-1581 Roberts Rd.
Center/FL/32815

City/State/Zip: Kennedy Space

Phone No: (321) 730-1469

Email: Katy.Groom@spacex.com

b. Prefix: Mrs. Full Name (Last/First Name): Wood/Carolyn

Title: Sr Environmental Regulatory Engineer Credential: Click to enter text.

Organization Name: SpaceX

Mailing Address: 1 Rocket Rd.

City/State/Zip: Brownsville/TX/78521

Phone No: (323) 537-0071

Email: Carolyn.wood@spacex.com

Attachment: Click to enter text.

Item 7. Billing Contact Information (Instructions, Page 28)

The permittee is responsible for paying the annual fee. The annual fee will be assessed for permits **in effect on September 1 of each year**. The TCEQ will send a bill to the address provided in this section. The permittee is responsible for terminating the permit when it is no longer needed (form TCEQ-20029).

Provide the complete mailing address where the annual fee invoice should be mailed and the name and phone number of the permittee's representative responsible for payment of the invoice.

Prefix: Mrs. Full Name (Last/First Name): Wood/Carolyn

Title: Sr. Environmental Regulatory Engineer

Credential: Click to enter text.

Organization Name: SpaceX

Mailing Address: 1 Rocket Rd.

City/State/Zip: Brownsville/TX/78521

Phone No: (323) 537-0071

Email: Carolyn.wood@spacex.com

Item 8. DMR/MER Contact Information (Instructions, Page 28)

Provide the name and mailing address of the person delegated to receive and submit DMRs or MERs. **Note:** DMR data must be submitted through the NetDMR system. An electronic reporting account can be established once the facility has obtained the permit number.

Prefix: Mrs. Full Name (Last/First Name): Wood/Carolyn

Title: Sr. Environmental Regulatory Engineer

Credential: Click to enter text.

Organization Name: SpaceX

Mailing Address: 1 Rocket Rd.

City/State/Zip: Brownsville/TX/78521

Phone No: (323) 537-0071

Email: Carolyn.wood@spacex.com

Item 9. Notice Information (Instructions, Pages 28)

a. Individual Publishing the Notices

Prefix: Mrs. Full Name (Last/First Name): Wood/Carolyn

Title: Sr. Environmental Regulatory Engineer

Credential: Click to enter text.

Organization Name: SpaceX

Mailing Address: 1 Rocket Rd.

City/State/Zip: Brownsville/TX/78521

Phone No: (323) 537-0071

Email: Carolyn.wood@spacex.com

b. Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package (only for NORI, NAPD will be sent via regular mail)

☒ E-mail: Carolyn.wood@spacex.com

☐ Fax: Click to enter text.

☒ Regular Mail (USPS)

Mailing Address: 1 Rocket Rd.

City/State/Zip Code: Brownsville/TX/78521

c. Contact in the Notice

Prefix: Mrs. Full Name (Last/First Name): Wood/Carolyn

Title: Sr. Environmental Regulatory Engineer

Credential: Click to enter text.

Organization Name: SpaceX

Phone No: (323) 537-0071

Email: Click to enter text.

d. Public Viewing Location Information

Note: If the facility or outfall is located in more than one county, provide a public viewing place for each county.

Public building name: Port Isabel Public Library

Location within the building: Circulation Desk

Physical Address of Building: 213 N Yturria St.

City: Port Isabel County: Cameron

e. Bilingual Notice Requirements

This information is required for new, major amendment, minor amendment or minor modification, and renewal applications.

This section of the application is only used to determine if alternative language notices will be needed. Complete instructions on publishing the alternative language notices will be in your public notice package.

Call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine if an alternative language notice(s) is required.

1. Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?

☒ Yes ☐ No

If no, publication of an alternative language notice is not required; skip to Item 8 (Regulated Entity and Permitted Site Information.)

2. Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?

☒ Yes ☐ No

3. Do the students at these schools attend a bilingual education program at another location?

☐ Yes ☒ No

4. Would the school be required to provide a bilingual education program, but the school has waived out of this requirement under 19 TAC §89.1205(g)?

☐ Yes ☒ No ☐ N/A

5. If the answer is yes to question 1, 2, 3, or 4, public notices in an alternative language are required. Which language is required by the bilingual program? Spanish

f. Plain Language Summary Template – Complete the Plain Language Summary (TCEQ Form 20972) and include as an attachment. Attachment: B “Plain Language Summary”

g. Complete one Public Involvement Plan (PIP) Form (TCEQ Form 20960) for each application for a new permit or major amendment and include as an attachment. Attachment: C “Public Involvement Plan (PIP)”

Item 10. Regulated Entity and Permitted Site Information (Instructions Page 29)

a. TCEQ issued Regulated Entity Number (RN), if available: RN111606745

Note: If your business site is part of a larger business site, a Regulated Entity Number (RN) may already be assigned for the larger site. Use the RN assigned for the larger site. Search the TCEQ’s Central Registry to determine the RN or to see if the larger site may already be registered as a Regulated Entity. If the site is found, provide the assigned RN.

b. Name of project or site (the name known by the community where located): Starbase Launch Pad Site

c. Is the location address of the facility in the existing permit the same?

☐ Yes ☐ No ☒ N/A (new permit)

Note: If the facility is located in Bexar, Comal, Hays, Kinney, Medina, Travis, Uvalde, or Williamson County, additional information concerning protection of the Edwards Aquifer may be required.

d. Owner of treatment facility:

Prefix: Click to enter text. Full Name (Last/First Name): Click to enter text.

or Organization Name: Space Exploration Technologies Corp

Mailing Address: 1 Rocket Rd.

City/State/Zip: Brownsville, TX 78521

Phone No: [Click to enter text.](#) Email: [Click to enter text.](#)

e. Ownership of facility: ☐ Public ☒ Private ☐ Both ☐ Federal

f. Owner of land where treatment facility is or will be: Space Exploration Technologies Corp.

Prefix: [Click to enter text.](#) Full Name (Last/First Name): [Click to enter text.](#)

or Organization Name: Space Exploration Technologies Corp.

Mailing Address: 1 Rocket Rd

City/State/Zip: Brownsville, TX 78521

Phone No: [Click to enter text.](#) Email: [Click to enter text.](#)

Note: If not the same as the facility owner, attach a long-term lease agreement in effect for at least six years (In some cases, a lease may not suffice - see instructions). Attachment: [Click to enter text.](#)

g. Owner of effluent TLAP disposal site (if applicable): NA

Prefix: [Click to enter text.](#) Full Name (Last/First Name): [Click to enter text.](#)

or Organization Name: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City/State/Zip: [Click to enter text.](#)

Phone No: [Click to enter text.](#) Email: [Click to enter text.](#)

Note: If not the same as the facility owner, attach a long-term lease agreement in effect for at least six years. Attachment: [Click to enter text.](#)

h. Owner of sewage sludge disposal site (if applicable):

Prefix: [Click to enter text.](#) Full Name (Last/First Name): [Click to enter text.](#)

or Organization Name: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City/State/Zip: [Click to enter text.](#)

Phone No: [Click to enter text.](#) Email: [Click to enter text.](#)

Note: If not the same as the facility owner, attach a long-term lease agreement in effect for at least six years. Attachment: [Click to enter text.](#)

Item 11. TDPES Discharge/TLAP Disposal Information (Instructions, Page 31)

a. Is the facility located on or does the treated effluent cross Native American Land?

☐ Yes ☒ No

b. Attach an original full size USGS Topographic Map (or an 8.5"×11" reproduced portion for renewal or amendment applications) with all required information. Check the box next to each item below to confirm it has been included on the map.

☒ One-mile radius

☒ Three-miles downstream information

☒ Applicant's property boundaries

☒ Treatment facility boundaries

☒ Labeled point(s) of discharge

☒ Highlighted discharge route(s)

☒ Effluent disposal site boundaries

☒ All wastewater ponds

☒ Sewage sludge disposal site

☒ New and future construction

Attachment: D “USGS Topographic Map”

- c. Is the location of the sewage sludge disposal site in the existing permit accurate?

☐ Yes ☒ No or New Permit

If no, or a new application, provide an accurate location description: NA

- d. Are the point(s) of discharge in the existing permit correct?

☐ Yes ☒ No or New Permit

If no, or a new application, provide an accurate location description: NA

- e. Are the discharge route(s) in the existing permit correct?

☐ Yes ☒ No or New Permit

If no, or a new permit, provide an accurate description of the discharge route: NA

- f. City nearest the outfall(s): Brownsville

- g. County in which the outfalls(s) is/are located: Cameron

- h. Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?

☐ Yes ☒ No

If yes, indicate by a check mark if: ☐ Authorization granted ☐ Authorization pending

For new and amendment applications, attach copies of letters that show proof of contact and provide the approval letter upon receipt. Attachment: NA

For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: NA

- i. For TLAPs, is the location of the effluent disposal site in the existing permit accurate?

☐ Yes ☐ No or New Permit ☐ NA

If no, or a new application, provide an accurate location description: Click to enter text.

- j. City nearest the disposal site: Click to enter text.

- k. County in which the disposal site is located: Click to enter text.

- l. For TLAPs, describe how effluent is/will be routed from the treatment facility to the disposal site: Click to enter text.

- m. For TLAPs, identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: Click to enter text.

Item 12. Miscellaneous Information (Instructions, Page 33)

- a. Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?

☒ Yes ☐ No

If yes, list each person: Carolyn A. Wood

- b. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

Account no.: Click to enter text.

Total amount due: Click to enter text.

- c. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

Enforcement order no.: Click to enter text.

Amount due: Click to enter text.

Item 13. Signature Page (Instructions, Page 33)

Permit No: WQ0000Click to enter text.

Applicant Name: Space Exploration Technologies, Corp.

Certification: I, Katy Groom, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code §305.44 to sign and submit this document and can provide documentation in proof of such authorization upon request.

Signatory name (typed or printed): Katy Groom

Signatory title: Manager of Environmental regulatory Affairs

Signature: [Handwritten Signature]
(Use blue ink)

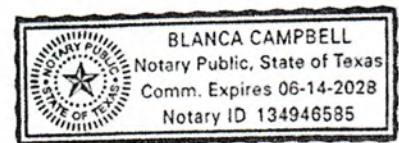
Date: 6/28/2024

Subscribed and Sworn to before me by the said Blanca Campbell
on this 28 day of June, 2024.

My commission expires on the 14 day of June, 2028.

Blanca Campbell
Notary Public

[SEAL]



Cameron
County, Texas

Note: If co-applicants are necessary, each entity must submit an original, separate signature page.

INDUSTRIAL WASTEWATER PERMIT APPLICATION

ADMINISTRATIVE REPORT 1.1

The following information is required for new and amendment applications.

Item 1. Affected Landowner Information (Instructions, Page 35)

- a. Attach a landowner map or drawing, with scale, as applicable. Check the box next to each item to confirm it has been provided.
- ☒ The applicant's property boundaries.
 - ☒ The facility site boundaries within the applicant's property boundaries.
 - ☒ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone.
 - ☒ The property boundaries of all landowners surrounding the applicant's property. (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
 - ☒ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream.
 - ☒ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge.
 - ☒ The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides.
 - ☒ The boundaries of the effluent disposal site (e.g., irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property.
 - ☒ The property boundaries of all landowners surrounding the applicant's property boundaries where the effluent disposal site is located.
 - ☐ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners within one-quarter mile of the applicant's property boundaries where the sewage sludge land application site is located.
 - ☒ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (e.g., sludge surface disposal site or sludge monofil) is located.

Attachment: E "Affected Land Owner Map"

- b. Check the box next to the format of the landowners list:

☐ Readable/Writeable CD ☒ Four sets of labels

Attachment: F "Landowner List"

- d. Provide the source of the landowners' names and mailing addresses: Cameron County Appraisal District
- e. As required by Texas Water Code § 5.115, is any permanent school fund land affected by this application?

☐ Yes ☒ No

If yes, provide the location and foreseeable impacts and effects this application has on the land(s): [Click to enter text.](#)

Item 2. Original Photographs (Instructions, Page 37)

Provide original ground level photographs. Check the box next to each of the following items to indicate it is included.

- ☒ At least one original photograph of the new or expanded treatment unit location.
- ☒ At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.
- ☒ At least one photograph of the existing/proposed effluent disposal site.
- ☒ A plot plan or map showing the location and direction of each photograph.

Attachment: [G "Original Photographs"](#)

INDUSTRIAL WASTEWATER PERMIT APPLICATION

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

This form applies to TPDES permit applications only. Complete and attach the Supplemental Permit information Form (SPIF) (TCEQ Form 20971).

Attachment: NA

Provide the name, address, phone and fax number of an individual that can be contacted to answer specific questions about the property.

Prefix (Mr., Ms., Miss): Mrs.

First and Last Name: Katy Groom

Credential (P.E, P.G., Ph.D., etc.):

Title: Manager, Environmental Regulatory Affairs

Mailing Address: L6-1581 Roberts Rd

City, State, Zip Code: Kennedy Space Center, FL 32815

Phone No.: 321-730-1469 Ext.: Fax No.:

E-mail Address: Katy.Groom@spacex.com

2. List the county in which the facility is located: Cameron
3. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

4. Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify the classified segment number.

The discharge route is to mudflats immediately outside fo the containment area and approximatley southwest of the launch pad, south to the final segment, 2301, of the Rio Grande River.

5. Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report).

Provide original photographs of any structures 50 years or older on the property.

Does your project involve any of the following? Check all that apply.

- ☐ Proposed access roads, utility lines, construction easements
- ☐ Visual effects that could damage or detract from a historic property's integrity
- ☐ Vibration effects during construction or as a result of project design
- ☐ Additional phases of development that are planned for the future

☐ Sealing caves, fractures, sinkholes, other karst features

☐ Disturbance of vegetation or wetlands

1. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):

N/A

2. Describe existing disturbances, vegetation, and land use:

No current land use

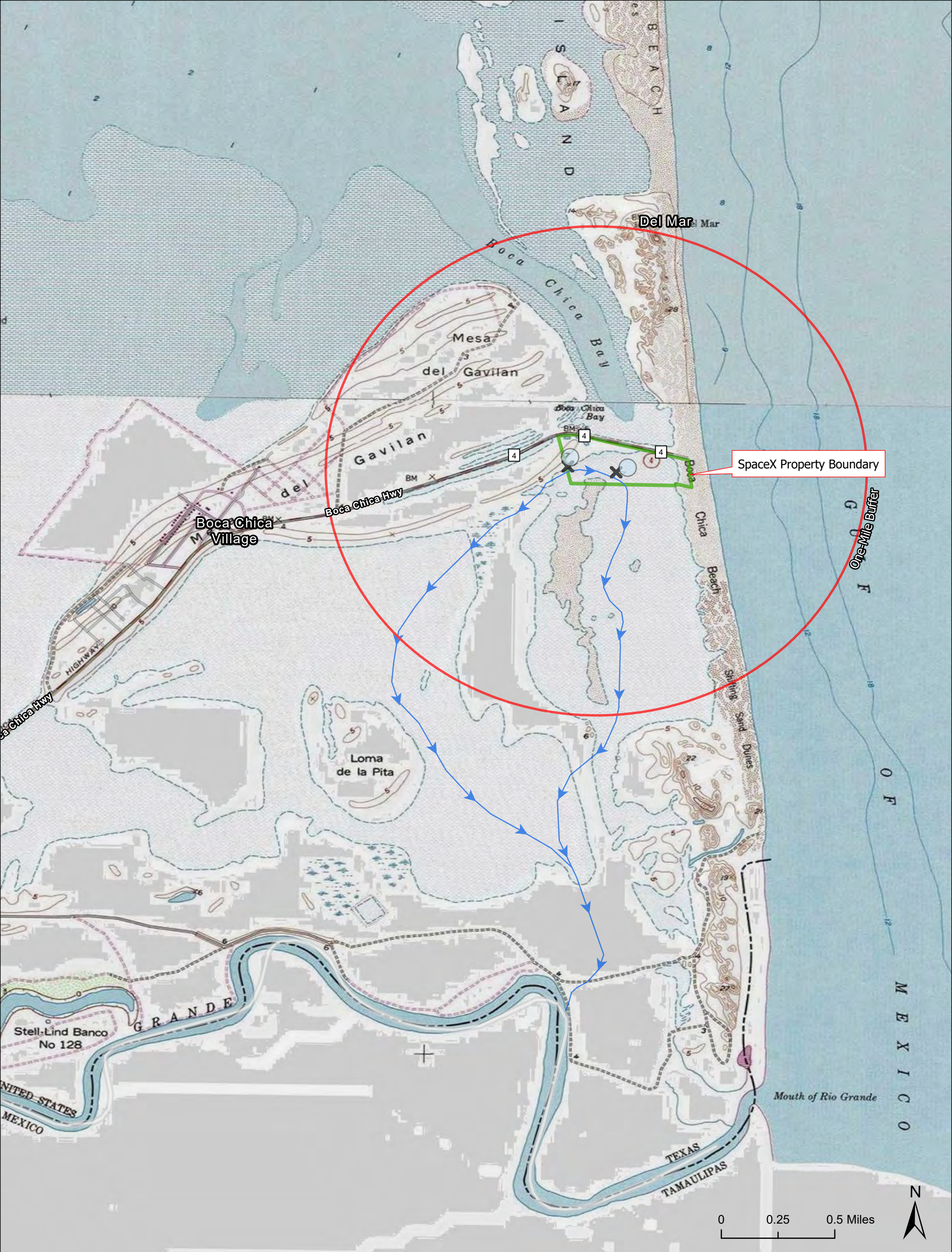
THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

3. List construction dates of all buildings and structures on the property:

N/A

4. Provide a brief history of the property, and name of the architect/builder, if known.

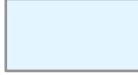
SpaceX launch facilities

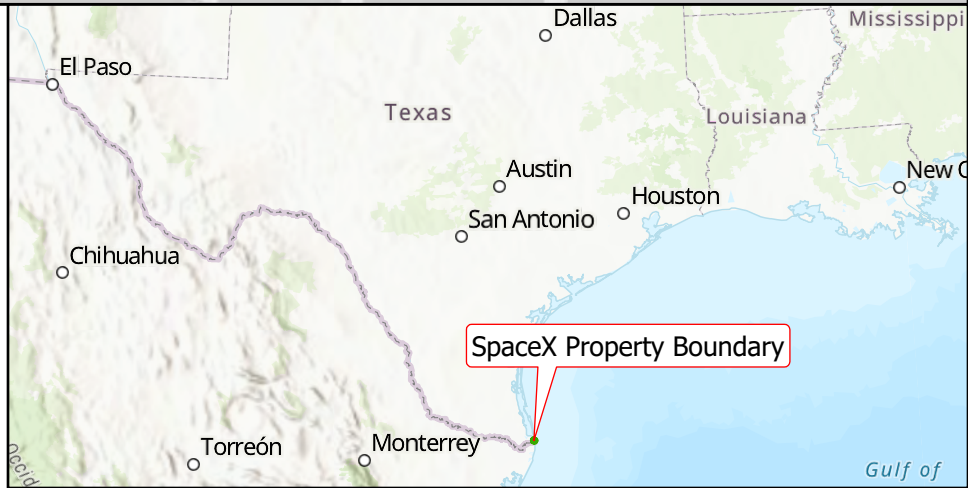


SPACEX

Launch Pad TPDES Permit

USGS Topographic Map

	SpaceX Property Boundary		Outfall & Sampling
	One-Mile Buffer		Downstream Flow
	Approximate Water Dispersal Limit		



WATER QUALITY PERMIT

PAYMENT SUBMITTAL FORM

Use this form to submit the Application Fee, if mailing the payment. (Instructions, Page 36-37)

- Complete items 1 through 5 below.
- Staple the check or money order in the space provided at the bottom of this document.
- Do not mail this form with the application form.
- Do not mail this form to the same address as the application.
- Do not submit a copy of the application with this form as it could cause duplicate permit entries.

Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
P.O. Box 13088
Austin, Texas 78711-3088

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, Texas 78753

Fee Code: WQP **Permit No:** WQ000 [Click to enter text.](#)

1. Check or Money Order Number: [Click to enter text.](#)
2. Check or Money Order Amount: [Click to enter text.](#)
3. Date of Check or Money Order: [Click to enter text.](#)
4. Name on Check or Money Order: [Click to enter text.](#)
5. APPLICATION INFORMATION

Name of Project or Site: [Click to enter text.](#)

Physical Address of Project or Site: [Click to enter text.](#)

If the check is for more than one application, attach a list which includes the name of each Project or Site (RE) and Physical Address, exactly as provided on the application.

Attachment: [Click to enter text.](#)

Staple Check or Money Order in This Space

ATTACHMENT 1

INDIVIDUAL INFORMATION

Item 1. Individual information (Instructions, Page 38)

Complete this attachment if the facility applicant or co-applicant is an individual. Make additional copies of this attachment if both are individuals.

Prefix (Mr., Ms., or Miss): [Click to enter text.](#)

Full legal name (first, middle, and last): [Click to enter text.](#)

Driver's License or State Identification Number: [Click to enter text.](#)

Date of Birth: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City, State, and Zip Code: [Click to enter text.](#)

Phone No.: [Click to enter text.](#)

Fax No.: [Click to enter text.](#)

E-mail Address: [Click to enter text.](#)

CN: [Click to enter text.](#)

INDUSTRIAL WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

Below is a list of common deficiencies found during the administrative review of industrial wastewater permit applications. To ensure the timely processing of this application, please review the items below and indicate each item is complete and in accordance applicable rules at 30 TAC Chapters 21, 281, and 305 by checking the box next to the item. If an item is not required this application, indicate by checking N/A where appropriate. Please do not submit the application until all items below are addressed.

- ☒ Core Data Form (TCEQ Form No. 10400)
*(Required for all applications types. Must be completed in its entirety and signed.
Note: Form may be signed by applicant representative.)*
- ☒ Correct and Current Industrial Wastewater Permit Application Forms
(TCEQ Form Nos. 10055 and 10411. Version dated 5/10/2019 or later.)
- ☒ Water Quality Permit Payment Submittal Form (Page 14)
(Original payment sent to TCEQ Revenue Section. See instructions for mailing address.)
- ☒ 7.5 Minute USGS Quadrangle Topographic Map Attached
*(Full-size map if seeking "New" permit.
8 ½ x 11 acceptable for Renewals and Amendments.)*
- ☒ N/A ☐ Current/Non-Expired, Executed Lease Agreement or Easement Attached
- ☐ N/A ☒ Landowners Map
(See instructions for landowner requirements.)

Things to Know:

- All the items shown on the map must be labeled.
- The applicant's complete property boundaries must be delineated which includes boundaries of contiguous property owned by the applicant.
- The applicant cannot be its own adjacent landowner. You must identify the landowners immediately adjacent to their property, regardless of how far they are from the actual facility.
- If the applicant's property is adjacent to a road, creek, or stream, the landowners on the opposite side must be identified. Although the properties are not adjacent to applicant's property boundary, they are considered potentially affected landowners. If the adjacent road is a divided highway as identified on the USGS topographic map, the applicant does not have to identify the landowners on the opposite side of the highway.

- ☐ N/A ☒ Landowners Cross Reference List
(See instructions for landowner requirements.)
- ☐ N/A ☒ Landowners Labels or CD-RW attached
(See instructions for landowner requirements.)
- ☒ Original signature per 30 TAC § 305.44 – Blue Ink Preferred
*(If signature page is not signed by an elected official or principle executive officer,
a copy of signature authority/delegation letter must be attached.)*
- ☒ Plain Language Summary

From: steers@tceq.texas.gov
To: [Carolyn Wood](#)
Subject: TCEQ ePay Receipt for 582EA000615822
Date: Thursday, June 27, 2024 5:12:23 PM

This is an automated message from the TCEQ ePay system. Please do not reply.

Trace Number: 582EA000615822

Date: 06/27/2024 05:11 PM

Payment Method: CC - Authorization 0000S94613

TCEQ Amount: \$350.00

Texas.gov Price: \$358.13*

* This service is provided by Texas.gov, the official website of Texas. The price of this service includes funds that support the ongoing operations and enhancements of Texas.gov, which is provided by a third party in partnership with the State.

Actor: CAROLYN WOOD

Email: carolyn.wood@spacex.com

Payment Contact: SHIRLEY YANG

Phone: 310-363-6000

Company: SPACEX

Address: 1 ROCKET ROAD, HAWTHORNE, CA 90250

Fees Paid:

Fee Description AR Number Amount

WW PERMIT - MINOR FACILITY NOT SUBJECT TO 40 CFR 400-471 - NEW \$300.00

30 TAC 305.53B WQ NOTIFICATION FEE \$50.00

TCEQ Amount: \$350.00

=====

Voucher: 711240

Trace Number: 582EA000615822

Date: 06/27/2024 05:11 PM

Payment Method: CC - Authorization 0000S94613

Voucher Amount: \$300.00

Fee Paid: WW PERMIT - MINOR FACILITY NOT SUBJECT TO 40 CFR 400-471 - NEW

Site Name: STARBASE LAUNCH PAD

Site Location: SH4 BOCA CHICA TEXAS 78521

CN Number: CN602867657

Customer Name: SPACE EXPLORATION TECHNOLOGIES CORP

State Franchise Tax ID: 10106276719

Customer Address: 1 ROCKET RD, HAWTHORNE, CA 90250 6844

Comments: Industrial Wastewater Permit Application Fee

Voucher: 711241

Trace Number: 582EA000615822

Date: 06/27/2024 05:11 PM

Payment Method: CC - Authorization 0000S94613

Voucher Amount: \$50.00

Fee Paid: 30 TAC 305.53B WQ NOTIFICATION FEE

=====

To print out a copy of the receipt and vouchers for this transaction
either click on or copy and paste the following url into your browser:
https://www3.tceq.texas.gov/epay/index.cfm?fuseaction=cor.search&trace_num_txt=582EA000615822.

This e-mail transmission and any attachments are believed to have been sent free of any virus or other defect that might affect

any computer system into which it is received and opened. It is, however, the recipient's responsibility to ensure that the e-mail transmission and any attachments are virus free, and the sender accepts no responsibility for any damage that may in any way arise from their use.



Your transaction is complete. Thank you for using TCEQ ePay.

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt and the vouchers for your records. An email receipt has also been sent.

Transaction Information

Trace Number: 582EA000615822
Date: 06/27/2024 05:11 PM
Payment Method: CC - Authorization 0000S94613
ePay Actor: CAROLYN WOOD
Actor Email: carolyn.wood@spacex.com
IP: 192.31.242.194
TCEQ Amount: \$350.00
Texas.gov Price: \$358.13*

* This service is provided by Texas.gov, the official website of Texas. The price of this service includes funds that support the ongoing operations and enhancements of Texas.gov, which is provided by a third party in partnership with the State.

Payment Contact Information

Name: SHIRLEY YANG
Company: SPACEX
Address: 1 ROCKET ROAD, HAWTHORNE, CA 90250
Phone: 310-363-6000

Cart Items

Click on the voucher number to see the voucher details.

Voucher	Fee Description	AR Number	Amount
711240	WW PERMIT - MINOR FACILITY NOT SUBJECT TO 40 CFR 400-471 - NEW		\$300.00
711241	30 TAC 305.53B WQ NOTIFICATION FEE		\$50.00
TCEQ Amount:			\$350.00

[ePay Again](#)

[Exit ePay](#)

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt for your records.

Attachment A



TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
☒ New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
☐ Renewal (Core Data Form should be submitted with the renewal form)	☐ Other	
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 6028676S7		RN 111606745

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)	
☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership			
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)			
The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).			
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)		If new Customer, enter previous Customer below:	
Space Exploration Technologies Corp.			
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
805421124	1-01-062767	01-0627671	120-406-462
11. Type of Customer:	☒ Corporation	☐ Individual	Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other	☐ Sole Proprietorship	☐ Other:	
12. Number of Employees		13. Independently Owned and Operated?	
☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☒ 501 and higher		☒ Yes ☐ No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following			
☐ Owner ☐ Operator ☒ Owner & Operator ☐ Other:			
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant			
15. Mailing Address:	1 Rocket Road		
City	Hawthorne	State	CA
ZIP	90250	ZIP + 4	6844
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)	
18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)	

SECTION III: Regulated Entity Information**21. General Regulated Entity Information** (If "New Regulated Entity" is selected, a new permit application is also required.)
☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)

Starbase Launch Pad Site

23. Street Address of the Regulated Entity:

(No PO Boxes)

1 Rocket Road

City

Brownsville

State

TX

ZIP

78521

ZIP + 4

0008

24. County

Cameron

If no Street Address is provided, fields 25-28 are required.

25. Description to

Physical Location:

26. Nearest City

State

Nearest ZIP Code

Brownsville

TX

78521

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:

25.996969

28. Longitude (W) In Decimal:

-97.156269

Degrees

Minutes

Seconds

Degrees

Minutes

Seconds

29. Primary SIC Code**30. Secondary SIC Code****31. Primary NAICS Code****32. Secondary NAICS Code**

(4 digits)

(4 digits)

(5 or 6 digits)

(5 or 6 digits)

3761

33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)

Launch site

34. Mailing

Address:

1 Rocket Road

City

Brownsville

State

TX

ZIP

78521

ZIP + 4

8

35. E-Mail Address:**36. Telephone Number****37. Extension or Code****38. Fax Number** (if applicable)

(323) 537-71

() -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

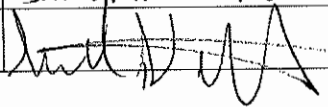
☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☒ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☒ Sludge	☒ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Carolyn A. Wood			41. Title:	Sr. Enviro Regulatory Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
(323) 537-0071		() -	carolyn.wood@spacex.com		

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Space exploration technologies	Job Title:	EHS Manager
Name (In Print):	Samantha Stecher-Stroud	Phone:	210/913 0901
Signature:		Date:	6.7.2024

Attachment B



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary as required by [Title 30, Texas Administrative Code \(30 TAC\), Chapter 39, Subchapter H](#). Applicants may modify the template as necessary to accurately describe their facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how the applicant will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements.

If you are subject to the alternative language notice requirements in [30 TAC Section 39.426](#), **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package**. For your convenience, a Spanish template has been provided below.

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS **INDUSTRIAL WASTEWATER/STORMWATER**

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Space Exploration Technologies Corp. (CN602867657) operates Starbase Launch Pad Site (RN111606745), a water deflector system. The facility is located at the south side of the eastern terminus of State Highway 4, in Brownsville, Cameron County, Texas 78521. The purpose of this application is to obtain a discharge permit for non-process deluge system water that is utilized during launch operations.

Discharges from the facility are expected to contain total dissolved solids, nitrate-nitrogen, phosphorus, total dissolved solids, sulfate, chloride, fluoride, aluminum, cadmium, chromium, copper, cyanide, and zinc. Wastewater will be treated by reusing deluge and pretreatment required.

PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP

AGUAS RESIDUALES INDUSTRIALES /AGUAS PLUVIALES

El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación ejecutiva fedérale de la solicitud de permiso.

Space Exploration Technologies Corp. (CN602867657) opera Starbase Launch Pad Site RN111606745, un deluge system. La instalación está ubicada en the south side of the eastern terminus of State Highway 4, en Brownsville, Condado de Cameron, Texas 78521. Obtener un permiso de descarga para el agua del Sistema de diluvio que no es de proceso y que se utiliza durante las operaciones de lanzamiento..

Se espera que las descargas de la instalación contengan solidos disueltos totales, nitrogeno-nitrato, fosforo, sulfato, cloruro, fluoruro, aluminio, cadmio, cromo, cobre, zinc y cianuro . Aguas residuals industriales. está tratado por mediante reutilizacion de agua de diluvio y pretratamiento degun sea necesario.

Total

INSTRUCTIONS

1. Enter the name of applicant in this section. The applicant name should match the name associated with the customer number.
2. Enter the Customer Number in this section. Each Individual or Organization is issued a unique 11-digit identification number called a CN (e.g. CN123456789).
3. Choose “operates” in this section for existing facility applications or choose “proposes to operate” for new facility applications.
4. Enter the name of the facility in this section. The facility name should match the name associated with the regulated entity number.
5. Enter the Regulated Entity number in this section. Each site location is issued a unique 11-digit identification number called an RN (e.g. RN123456789).
6. Choose the appropriate article (a or an) to complete the sentence.
7. Enter a description of the facility in this section. For example: steam electric generating facility, nitrogenous fertilizer manufacturing facility, etc.
8. Choose “is” for an existing facility or “will be” for a new facility.
9. Enter the location of the facility in this section.
10. Enter the City nearest the facility in this section.
11. Enter the County nearest the facility in this section.
12. Enter the zip code for the facility address in this section.
13. Enter a summary of the application request in this section. For example: renewal to discharge 25,000 gallons per day of treated domestic wastewater, new application to discharge process wastewater and stormwater on an intermittent and flow-variable basis, or major amendment to reduce monitoring frequency for pH, etc. If more than one outfall is included in the application, provide applicable information for each individual outfall.
14. List all pollutants expected in the discharge from this facility in this section. If applicable, refer to the pollutants from any federal numeric effluent limitations that apply to your facility.
15. Enter the discharge types from your facility in this section (e.g., stormwater, process wastewater, once through cooling water, etc.)
16. Choose the appropriate verb tense to complete the sentence.
17. Enter a description of the wastewater treatment used at your facility. Include a description of each process, starting with initial treatment and finishing with the outfall/point of disposal. Use additional lines for individual discharge types if necessary.

Questions or comments concerning this form may be directed to the Water Quality Division's Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

Example

Individual Industrial Wastewater Application

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

ABC Corporation (CN600000000) operates the Starr Power Station (RN10000000000), a two-unit gas-fired electric generating facility. Unit 1 has a generating capacity of 393 megawatts (MWs) and Unit 2 has a generating capacity of 528 MWs. The facility is located at 1356 Starr Street, near the City of Austin, Travis County, Texas 78753.

This application is for a renewal to discharge 870,000,000 gallons per day of once through cooling water, auxiliary cooling water, and also authorizes the following waste streams monitored inside the facility (internal outfalls) before it is mixed with the other wastewaters authorized for discharge via main Outfall 001, referred to as “previously monitored effluents” (low-volume wastewater, metal-cleaning waste, and stormwater (from diked oil storage area yards and storm drains)) via Outfall 001. Low-volume waste sources, metal-cleaning waste, and stormwater drains on a continuous and flow-variable basis via internal Outfall 101.

The discharge of once through cooling water via Outfall 001 and low-volume waste and metal-cleaning waste via Outfall 101 from this facility is subject to federal effluent limitation guidelines at 40 CFR Part 423. The pollutants expected from these discharges based on 40 CFR Part 423 are: free available chlorine, total residual chlorine, total suspended solids, oil and grease, total iron, total copper, and pH. Temperature is also expected from these discharges. Additional potential pollutants are included in the Industrial Wastewater Application Technical Report, Worksheet 2.0.

Cooling water and boiler make-up water are supplied by Lake Starr Reservoir. The City of Austin municipal water plant (CN600000000, PWS 00000) supplies the facility’s potable water and serves as an alternate source of boiler make-up water. Water from the Lake Starr Reservoir is withdrawn at the intake structure and treated with sodium hypochlorite to prevent biofouling and sodium bromide as a chlorine enhancer to improve efficacy and then passed through condensers and auxiliary equipment on a once-through basis to cool equipment and condense exhaust steam.

Low-volume wastewater from blowdown of boiler Units 1 and 2 and metal-cleaning wastes receive no treatment prior to discharge via Outfall 101. Plant floor and equipment drains and stormwater runoff from diked oil storage areas, yards, and storm drains are routed through an oil and water separator prior to discharge via Outfall 101. Domestic wastewater, blowdown, and backwash water from the service water filter, clarifier, and sand filter are routed to the Starr Creek Domestic Sewage Treatment Plant, TPDES Permit No. WQ0010000001, for treatment and disposal. Metal-cleaning waste from equipment cleaning is generally disposed of off-site.

Attachment C



Texas Commission on Environmental Quality

Public Involvement Plan Form for Permit and Registration Applications

The Public Involvement Plan is intended to provide applicants and the agency with information about how public outreach will be accomplished for certain types of applications in certain geographical areas of the state. It is intended to apply to new activities; major changes at existing plants, facilities, and processes; and to activities which are likely to have significant interest from the public. This preliminary screening is designed to identify applications that will benefit from an initial assessment of the need for enhanced public outreach.

All applicable sections of this form should be completed and submitted with the permit or registration application. For instructions on how to complete this form, see TCEQ-20960-inst.

Section 1. Preliminary Screening

- ☒ New Permit or Registration Application
☐ New Activity - modification, registration, amendment, facility, etc. (see instructions)

If neither of the above boxes are checked, completion of the form is not required and does not need to be submitted.

Section 2. Secondary Screening

- ☒ Requires public notice,
☒ Considered to have significant public interest, **and**
☒ Located within any of the following geographical locations:

- Austin
- Dallas
- Fort Worth
- Houston
- San Antonio
- West Texas
- Texas Panhandle
- Along the Texas/Mexico Border
- Other geographical locations should be decided on a case-by-case basis

**If all the above boxes are not checked, a Public Involvement Plan is not necessary.
Stop after Section 2 and submit the form.**

- ☐ Public Involvement Plan not applicable to this application. Provide **brief** explanation.

Section 3. Application Information

Type of Application (check all that apply):

Air ☐ Initial ☐ Federal ☐ Amendment ☐ Standard Permit ☐ Title V
Waste ☐ Municipal Solid Waste ☐ Industrial and Hazardous Waste ☐ Scrap Tire
☐ Radioactive Material Licensing ☐ Underground Injection Control

Water Quality

- ☒ Texas Pollutant Discharge Elimination System (TPDES)
☐ Texas Land Application Permit (TLAP)
☐ State Only Concentrated Animal Feeding Operation (CAFO)
☐ Water Treatment Plant Residuals Disposal Permit
☐ Class B Biosolids Land Application Permit
☐ Domestic Septage Land Application Registration

Water Rights New Permit

- ☐ New Appropriation of Water
☐ New or existing reservoir

Amendment to an Existing Water Right

- ☐ Add a New Appropriation of Water
☐ Add a New or Existing Reservoir
☐ Major Amendment that could affect other water rights or the environment

Section 4. Plain Language Summary

Provide a brief description of planned activities.

Deflector wastewater would be reused in the deluge system. Sedimentation controls would be utilized to be used/proposed to prepare industrial wastewater for re-use.

Section 5. Community and Demographic Information

Community information can be found using EPA's EJ Screen, U.S. Census Bureau information, or generally available demographic tools.

Information gathered in this section can assist with the determination of whether alternative language notice is necessary. Please provide the following information.

Brownsville

(City)

Cameron County

(County)

(Census Tract)

Please indicate which of these three is the level used for gathering the following information.

☐

City

☒

County

☐

Census Tract

(a) Percent of people over 25 years of age who at least graduated from high school

70.9%

(b) Per capita income for population near the specified location

\$21,440

(c) Percent of minority population and percent of population by race within the specified location

White, 96.8%; Black or African American, 1%; American Indian & Alaska Native, 0.7%; Asian, 0.9%; Native Hawaiian & other Pacific Islander, 0.1%; 2 or more Races, 0.6%; Hispanic or Latino, 89.8%; White alone, not Hispanic or Latino, 8.5%

(d) Percent of Linguistically Isolated Households by language within the specified location

Language other than English spoken at home, 71% Spanish

(e) Languages commonly spoken in area by percentage

English and Spanish

(f) Community and/or Stakeholder Groups

(g) Historic public interest or involvement

TPDES Permit application for municipal wastewater, permit No. WQ0016342001 garnered significant public interest. The site itself and historic activities garner significant public interest

Section 6. Planned Public Outreach Activities

(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?

☐ Yes ☐ No

(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?

☐ Yes ☐ No

If Yes, please describe.

N/A

If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.

(c) Will you provide notice of this application in alternative languages?

☐ Yes ☐ No

Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the alternative language.

If yes, how will you provide notice in alternative languages?

- ☒ Publish in alternative language newspaper
- ☒ Posted on Commissioner's Integrated Database Website
- ☐ Mailed by TCEQ's Office of the Chief Clerk
- ☐ Other (specify)

(d) Is there an opportunity for some type of public meeting, including after notice?

☐ Yes ☐ No

(e) If a public meeting is held, will a translator be provided if requested?

☐ Yes ☐ No

(f) Hard copies of the application will be available at the following (check all that apply):

- ☒ TCEQ Regional Office ☒ TCEQ Central Office
- ☒ Public Place (specify) Port Isabel Public Library

Section 7. Voluntary Submittal

For applicants voluntarily providing this Public Involvement Plan, who are not subject to formal public participation requirements.

Will you provide notice of this application, including notice in alternative languages?

☐ Yes ☐ No

What types of notice will be provided?

- ☐ Publish in alternative language newspaper
- ☐ Posted on Commissioner's Integrated Database Website
- ☐ Mailed by TCEQ's Office of the Chief Clerk
- ☐ Other (specify)



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INDUSTRIAL WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

The following information **is required** for all applications for a TLAP or an individual TPDES discharge permit.

For **additional information** or clarification on the requested information, please refer to the [Instructions for Completing the Industrial Wastewater Permit Application](https://www.tceq.texas.gov/permitting/wastewater/industrial/TPDES_industrial_wastewater_steps.html)¹ available on the TCEQ website. Please contact the Industrial Permits Team at 512-239-4671 with any questions about this form.

If more than one outfall is included in the application, provide applicable information for each individual outfall. **If an item does not apply to the facility, enter N/A** to indicate that the item has been considered. Include separate reports or additional sheets as **clearly cross-referenced attachments** and provide the attachment number in the space provided for the item the attachment addresses.

NOTE: This application is for an industrial wastewater permit only. Additional authorizations from the TCEQ Waste Permits Division or the TCEQ Air Permits Division may be needed.

Item 1. Facility/Site Information (Instructions, Page 39)

- a. Describe the general nature of the business and type(s) of industrial and commercial activities. Include all applicable SIC codes (up to 4).

Starbase Launch Pad Site serves as site for rocket launch activity of SpaceX Starship-Super Heavy launch vehicle. Applicable SIC codes include 3761 GUIDED MISSILES AND SPACE VEHICLES.

- b. Describe all wastewater-generating processes at the facility.

Discharge water will consist of minor amounts of deluge water not captured by the containment area during vehicle launch activities, deluge water captured by the containment area in retention pond and stormwater.

¹

https://www.tceq.texas.gov/permitting/wastewater/industrial/TPDES_industrial_wastewater_steps.html

- c. Provide a list of raw materials, major intermediates, and final products handled at the facility.

Materials List

Raw Materials	Intermediate Products	Final Products
Source water (potable, raw, and Type 1 reclaimed water)		Heat
		Combustion products of liquid oxygen and liquid methane (CO2 and water)

Attachment: N/A

- d. Attach a facility map (drawn to scale) with the following information:

- Production areas, maintenance areas, materials-handling areas, waste-disposal areas, and water intake structures.
- The location of each unit of the WWTP including the location of wastewater collection sumps, impoundments, outfalls, and sampling points, if significantly different from outfall locations.

Attachment: H Facility Map

- e. Is this a new permit application for an existing facility?

☒ Yes ☐ No

If **yes**, provide background discussion: Obtain additional permit coverage for deluge discharge.

- f. Is/will the treatment facility/disposal site be located above the 100-year frequency flood level.

☐ Yes ☒ No

List source(s) used to determine 100-year frequency flood plain: FEMA

If **no**, provide the elevation of the 100-year frequency flood plain and describe what protective measures are used/proposed to prevent flooding (including tail water and rainfall run-on controls) of the treatment facility and disposal area: Elevation 10

Attachment: I 100-yr Flood Map

- g. For **new** or **major amendment** permit applications, will any construction operations result in a discharge of fill material into a water in the state?

☐ Yes ☒ No ☐ N/A (renewal only)

- h. If **yes** to Item 1.g, has the applicant applied for a USACE CWA Chapter 404 Dredge and Fill permit?

☐ Yes ☒ No

If **yes**, provide the permit number: [Click to enter text.](#)

If **no**, provide an approximate date of application submittal to the USACE: [Click to enter text.](#)

Item 2. Treatment System (Instructions, Page 40)

- a. List any physical, chemical, or biological treatment process(es) used/proposed to treat wastewater at this facility. Include a description of each treatment process, starting with initial treatment and finishing with the outfall/point of disposal.

Deluge water would be reused in the deluge system. Sedimentation controls would be utilized to be used/proposed to prepare industrial wastewater for re-use.

- b. Attach a flow schematic **with a water balance** showing all sources of water and wastewater flow into the facility, wastewater flow into and from each treatment unit, and wastewater flow to each outfall/point of disposal.

Attachment: [J Water Balance](#)

Item 3. Impoundments (Instructions, Page 40)

Does the facility use or plan to use any wastewater impoundments (e.g., lagoons or ponds?)

☒ Yes ☐ No

If **no**, proceed to Item 4. If **yes**, complete **Item 3.a** for **existing** impoundments and **Items 3.a - 3.e** for **new or proposed** impoundments. **NOTE:** See instructions, Pages 40-42, for additional information on the attachments required by Items 3.a - 3.e.

- a. Complete the table with the following information for each existing, new, or proposed impoundment. Attach additional copies of the Impoundment Information table, if needed.

Use Designation: Indicate the use designation for each impoundment as Treatment (T), Disposal (D), Containment (C), or Evaporation (E).

Associated Outfall Number: Provide an outfall number if a discharge occurs or will occur.

Liner Type: Indicate the liner type as Compacted clay liner (C), In-situ clay liner (I), Synthetic/plastic/rubber liner (S), or Alternate liner (A). **NOTE:** See instructions for further detail on liner specifications. If an alternate liner (A) is selected, include an attachment that provides a description of the alternate liner and any additional technical information necessary for an evaluation.

Leak Detection System: If any leak detection systems are in place/planned, enter Y for yes. Otherwise, enter N for no.

Groundwater Monitoring Wells and Data: If groundwater monitoring wells are in place/planned, enter Y for yes. Otherwise, enter N for no. Attach any existing groundwater monitoring data.

Dimensions: Provide the dimensions, freeboard, surface area, storage capacity of the impoundments, and the maximum depth (not including freeboard). For impoundments with irregular shapes, submit surface area instead of length and width.

Compliance with 40 CFR Part 257, Subpart D: If the impoundment is required to be in compliance with 40 CFR Part 257, Subpart D, enter Y for yes. Otherwise, enter N for no.

Date of Construction: Enter the date construction of the impoundment commenced (mm/dd/yy).

Impoundment Information

Parameter	Pond #	Pond #	Pond #	Pond #
Use Designation: (T) (D) (C) or (E)	C	C		
Associated Outfall Number	001	002		
Liner Type (C) (I) (S) or (A)	N	N		
Alt. Liner Attachment Reference	N	N		
Leak Detection System, Y/N	N	N		
Groundwater Monitoring Wells, Y/N	N	N		
Groundwater Monitoring Data Attachment	N	N		
Pond Bottom Located Above The Seasonal High-Water Table, Y/N	N	N		
Length (ft)	180 ft	180 ft		
Width (ft)	45 ft	45 ft		
Max Depth From Water Surface (ft), Not Including Freeboard	4.5 ft	4.5 ft		
Freeboard (ft)	2 ft	2 ft		
Surface Area (acres)	7,500 sq ft	7,500 sq ft		
Storage Capacity (gallons)	273,000 gal	273,000 gal		

Parameter	Pond #	Pond #	Pond #	Pond #
40 CFR Part 257, Subpart D, Y/N	N	N		
Date of Construction	2023	2024		

Attachment: N/A

The following information (**Items 3.b – 3.e**) is required only for **new or proposed** impoundments.

- b. For new or proposed impoundments, attach any available information on the following items. If attached, check **yes** in the appropriate box. Otherwise, check **no** or **not yet designed**.

1. Liner data

☐ Yes ☒ No ☐ Not yet designed

2. Leak detection system or groundwater monitoring data

☐ Yes ☒ No ☐ Not yet designed

3. Groundwater impacts

☐ Yes ☒ No ☐ Not yet designed

NOTE: Item b.3 is required if the bottom of the pond is not above the seasonal high-water table in the shallowest water-bearing zone.

Attachment: N/A

For TLAP applications: Items 3.c – 3.e are not required, continue to Item 4.

- c. Attach a USGS map or a color copy of original quality and scale which accurately locates and identifies all known water supply wells and monitor wells within ½-mile of the impoundments.

Attachment: N/A

- d. Attach copies of State Water Well Reports (e.g., driller's logs, completion data, etc.), and data on depths to groundwater for all known water supply wells including a description of how the depths to groundwater were obtained.

Attachment: N/A

- e. Attach information pertaining to the groundwater, soils, geology, pond liner, etc. used to assess the potential for migration of wastes from the impoundments or the potential for contamination of groundwater or surface water.

Attachment: N/A

Item 4. Outfall/Disposal Method Information (Instructions, Page 42)

Complete the following tables to describe the location and wastewater discharge or disposal operations for each outfall for discharge, and for each point of disposal for TLAP operations.

If there are more outfalls/points of disposal at the facility than the spaces provided, copies of pages 6 and/or numbered accordingly (i.e., page 6a, 6b, etc.) may be used to provide information on the additional outfalls.

For TLAP applications: Indicate the disposal method and each individual irrigation area **I**, evaporation pond **E**, or subsurface drainage system **S** by providing the appropriate letter designation for the disposal method followed by a numerical designation for each disposal area in the space provided for **Outfall** number (e.g. **E1** for evaporation pond 1, **I2** for irrigation area No. 2, etc.).

Outfall Longitude and Latitude

Outfall No.	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)
001	25.996058	-97.155238
002	25.9961862	-97.1582205

Outfall Location Description

Outfall No.	Location Description
001	To mudflats located immediately outside of the containment area and approximately 290 feet southwest of the launch pad, at the bottom southern edge of the containment wall and retention pond located at approximately 25.995617, -97.154928.
002	To mudflats located immediately outside of the containment area and approximately 290 feet southwest of the launch pad, at the bottom southern edge of the containment wall and retention pond located at approximately 25.9961862, -97.1582205.

Description of Sampling Point(s) (if different from Outfall location)

Outfall No.	Description of sampling point
001	To mudflats located immediately outside of the containment area and approximately 290 feet southwest of the launch pad, at the bottom southern edge of the containment wall and retention pond located at approximately 25.995617, -97.154928.
002	To mudflats located immediately outside of the containment area and approximately 290 feet southwest of the launch pad, at the bottom southern edge of the containment wall and retention pond located at approximately 25.9961862, -97.1582205.

Outfall Flow Information – Permitted and Proposed

Outfall No.	Permitted Daily Avg Flow (MGD)	Permitted Daily Max Flow (MGD)	Proposed Daily Avg Flow (MGD)	Proposed Daily Max Flow (MGD)	Anticipated Discharge Date (mm/dd/yy)
001	Variable	Variable	Variable	Variable	Variable
002	Variable	Variable	Variable	Variable	Variable

Outfall No.	Permitted Daily Avg Flow (MGD)	Permitted Daily Max Flow (MGD)	Proposed Daily Avg Flow (MGD)	Proposed Daily Max Flow (MGD)	Anticipated Discharge Date (mm/dd/yy)

Outfall Discharge - Method and Measurement

Outfall No.	Pumped Discharge? Y/N	Gravity Discharge? Y/N	Type of Flow Measurement Device Used
001	N/A	Y	N/A
002	N/A	Y	N/A

Outfall Discharge - Flow Characteristics

Outfall No.	Intermittent Discharge? Y/N	Continuous Discharge? Y/N	Seasonal Discharge? Y/N	Discharge Duration (hrs/day)	Discharge Duration (days/mo)	Discharge Duration (mo/yr)
001	Y	N	N	Variable	Variable	Variable
002	Y	N	N	Variable	Variable	Variable

Outfall Wastestream Contributions

Outfall No. 001

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow
Stormwater	Variable	Variable

Outfall No. 002

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow
Stormwater	Variable	Variable

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow

Outfall No. [Click to enter text.](#)

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow

Attachment: [Click to enter text.](#)

Item 5. Blowdown and Once-Through Cooling Water Discharges (Instructions, Page 43)

a. Indicate if the facility currently or proposes to:

- ☐ Yes ☒ No Use cooling towers that discharge blowdown or other wastestreams
☐ Yes ☒ No Use boilers that discharge blowdown or other wastestreams
☐ Yes ☒ No Discharge once-through cooling water

NOTE: If the facility uses or plans to use cooling towers or once-through cooling water, Item 12 **is required**.

b. If **yes** to any of the above, attach an SDS with the following information for each chemical additive.

- Manufacturers Product Identification Number
- Product use (e.g., biocide, fungicide, corrosion inhibitor, etc.)
- Chemical composition including CASRN for each ingredient
- Classify product as non-persistent, persistent, or bioaccumulative
- Product or active ingredient half-life
- Frequency of product use (e.g., 2 hours/day once every two weeks)
- Product toxicity data specific to fish and aquatic invertebrate organisms

- Concentration of whole product or active ingredient, as appropriate, in wastestream.

In addition to each SDS, attach a summary of the above information for each specific wastestream and the associated chemical additives. Specify which outfalls are affected.

Attachment: N/A

c. Cooling Towers and Boilers

If the facility currently or proposes to use cooling towers or boilers that discharge blowdown or other wastestreams to the outfall(s), complete the following table.

Cooling Towers and Boilers

Type of Unit	Number of Units	Daily Avg Blowdown (gallons/day)	Daily Max Blowdown (gallons/day)
Cooling Towers			
Boilers			

Item 6. Stormwater Management (Instructions, Page 44)

Will any existing/proposed outfalls discharge stormwater associated with industrial activities, as defined at 40 CFR § 122.26(b)(14), commingled with any other wastestream?

☒ Yes ☐ No

If **yes**, briefly describe the industrial processes and activities that occur outdoors or in a manner which may result in exposure of the activities or materials to stormwater: Automotive maintenance

Item 7. Domestic Sewage, Sewage Sludge, and Septage Management and Disposal (Instructions, Page 44)

Domestic Sewage - Waste and wastewater from humans or household operations that is discharged to a wastewater collection system or otherwise enters a treatment works.

- a. Check the box next to the appropriate method of domestic sewage and domestic sewage sludge treatment or disposal. Complete Worksheet 5.0 or Item 7.b if directed to do so.
- ☒ Domestic sewage is routed (i.e., connected to or transported to) to a WWTP permitted to receive domestic sewage for treatment, disposal, or both. Complete Item 7.b.
 - ☐ Domestic sewage disposed of by an on-site septic tank and drainfield system. Complete Item 7.b.
 - ☐ Domestic and industrial treatment sludge ARE commingled prior to use or disposal.
 - ☐ Industrial wastewater and domestic sewage are treated separately, and the respective sludge IS NOT commingled prior to sludge use or disposal. Complete Worksheet 5.0.
 - ☐ Facility is a POTW. Complete Worksheet 5.0.
 - ☐ Domestic sewage is not generated on-site.
 - ☐ Other (e.g., portable toilets), specify and Complete Item 7.b: Click to enter text.

- b. Provide the name and TCEQ, NPDES, or TPDES Permit No. of the waste-disposal facility which receives the domestic sewage/septage. If hauled by motorized vehicle, provide the name and TCEQ Registration No. of the hauler.

Domestic Sewage Plant/Hauler Name

Plant/Hauler Name	Permit/Registration No.
Starbase WWTP/Space Exploration Technologies (sludge hauler)	2E0000327/sludge ID no. 26143

Item 8. Improvements or Compliance/Enforcement Requirements (Instructions, Page 45)

- a. Is the permittee currently required to meet any implementation schedule for compliance or enforcement?
- ☐ Yes ☒ No
- b. Has the permittee completed or planned for any improvements or construction projects?
- ☐ Yes ☒ No
- c. If **yes** to either 8.a or 8.b, provide a brief summary of the requirements and a status update: SpaceX is working closely with the TCEQ and the US EPA to obtain additional expedited permit coverage order to comply with the terms of an Administrative Order.

Item 9. Toxicity Testing (Instructions, Page 45)

Have any biological tests for acute or chronic toxicity been made on any of the discharges or on a receiving water in relation to the discharge within the last three years?

☐ Yes ☒ No

If **yes**, identify the tests and describe their purposes: [Click to enter text.](#)

Additionally, attach a copy of all tests performed which **have not** been submitted to the TCEQ or EPA. **Attachment:** [Click to enter text.](#)

Item 10. Off-Site/Third Party Wastes (Instructions, Page 45)

- a. Does or will the facility receive wastes from off-site sources for treatment at the facility, disposal on-site via land application, or discharge via a permitted outfall?
- ☐ Yes ☒ No

If **yes**, provide responses to Items 10.b through 10.d below.

If **no**, proceed to Item 11.

- b. Attach the following information to the application:
- List of wastes received (including volumes, characterization, and capability with on-site wastes).
 - Identify the sources of wastes received (including the legal name and addresses of the generators).

- Description of the relationship of waste source(s) with the facility's activities.

Attachment: [Click to enter text.](#)

- c. Is or will wastewater from another TCEQ, NPDES, or TPDES permitted facility commingled with this facility's wastewater after final treatment and prior to discharge via the final outfall/point of disposal?

☐ Yes ☒ No

If **yes**, provide the name, address, and TCEQ, NPDES, or TPDES permit number of the contributing facility and a copy of any agreements or contracts relating to this activity.

Attachment: [Click to enter text.](#)

- d. Is this facility a POTW that accepts/will accept process wastewater from any SIU and has/is required to have an approved pretreatment program under the NPDES/TPDES program?

☐ Yes ☒ No

If **yes**, **Worksheet 6.0** of this application **is required**.

Item 11. Radioactive Materials (Instructions, Page 46)

- a. Are/will radioactive materials be mined, used, stored, or processed at this facility?

☐ Yes ☒ No

If **yes**, use the following table to provide the results of one analysis of the effluent for all radioactive materials that may be present. Provide results in pCi/L.

Radioactive Materials Mined, Used, Stored, or Processed

Radioactive Material Name	Concentration (pCi/L)

- b. Does the applicant or anyone at the facility have any knowledge or reason to believe that radioactive materials may be present in the discharge, including naturally occurring radioactive materials in the source waters or on the facility property?

☐ Yes ☒ No

If **yes**, use the following table to provide the results of one analysis of the effluent for all radioactive materials that may be present. Provide results in pCi/L. Do not include information provided in response to Item 11.a.

Radioactive Materials Present in the Discharge

Radioactive Material Name	Concentration (pCi/L)

Radioactive Material Name	Concentration (pCi/L)

Item 12. Cooling Water (Instructions, Page 46)

a. Does the facility use or propose to use water for cooling purposes?

☐ Yes ☒ No

If **no**, stop here. If **yes**, complete Items 12.b thru 12.f.

b. Cooling water is/will be obtained from a groundwater source (e.g., on-site well).

☐ Yes ☐ No

If **yes**, stop here. If **no**, continue.

c. Cooling Water Supplier

1. Provide the name of the owner(s) and operator(s) for the CWIS that supplies or will supply water for cooling purposes to the facility.

Cooling Water Intake Structure(s) Owner(s) and Operator(s)

CWIS ID				
Owner				
Operator				

2. Cooling water is/will be obtained from a Public Water Supplier (PWS)

☐ Yes ☐ No

If **no**, continue. If **yes**, provide the PWS Registration No. and stop here: PWS No. [Click to enter text.](#)

3. Cooling water is/will be obtained from a reclaimed water source?

☐ Yes ☐ No

If **no**, continue. If **yes**, provide the Reuse Authorization No. and stop here: [Click to enter text.](#)

4. Cooling water is/will be obtained from an Independent Supplier

☐ Yes ☐ No

If **no**, proceed to Item 12.d. If **yes**, provide the actual intake flow of the Independent Supplier's CWIS that is/will be used to provide water for cooling purposes and proceed: [Click to enter text.](#)

d. 316(b) General Criteria

1. The CWIS(s) used to provide water for cooling purposes to the facility has or will have a cumulative design intake flow of 2 MGD or greater.

☐ Yes ☐ No

2. At least 25% of the total water withdrawn by the CWIS is/will be used at the facility exclusively for cooling purposes on an annual average basis.

☐ Yes ☐ No

3. The CWIS(s) withdraw(s)/propose(s) to withdraw water for cooling purposes from surface waters that meet the definition of Waters of the United States in *40 CFR § 122.2*.

☐ Yes ☐ No

If **no**, provide an explanation of how the waterbody does not meet the definition of Waters of the United States in *40 CFR § 122.2*: [Click to enter text.](#)

If **yes** to all three questions in Item 12.d, the facility **meets** the minimum criteria to be subject to the full requirements of Section 316(b) of the CWA. Proceed to **Item 12.f**.

If **no** to any of the questions in Item 12.d, the facility **does not meet** the minimum criteria to be subject to the full requirements of Section 316(b) of the CWA; however, a determination is required based upon BPJ. Proceed to **Item 12.e**.

- e. The facility does not meet the minimum requirements to be subject to the fill requirements of Section 316(b) **and uses/proposes to use cooling towers**.

☐ Yes ☐ No

If **yes**, stop here. If **no**, complete Worksheet 11.0, Items 1.a, 1.b.1-3 and 6, 2.b.1, and 3.a to allow for a determination based upon BPJ.

f. Oil and Gas Exploration and Production

1. The facility is subject to requirements at 40 CFR Part 435, Subparts A or D.

☐ Yes ☐ No

If **yes**, continue. If **no**, skip to Item 12.g.

2. The facility is an existing facility as defined at 40 CFR § 125.92(k) or a new unit at an existing facility as defined at 40 CFR § 125.92(u).

☐ Yes ☐ No

If **yes**, complete Worksheet 11.0, Items 1.a, 1.b.1-3 and 6, 2.b.1, and 3.a to allow for a determination based upon BPJ. If **no**, skip to Item 12.g.3.

g. Compliance Phase and Track Selection

1. Phase I – New facility subject to 40 CFR Part 125, Subpart I

☐ Yes ☐ No

If **yes**, check the box next to the compliance track selection, attach the requested information, and complete Worksheet 11.0, Items 2 and 3, and Worksheet 11.2.

☐ Track I – AIF greater than 2 MGD, but less than 10 MGD

- Attach information required by *40 CFR §§ 125.86(b)(2)-(4)*.

☐ Track I – AIF greater than 10 MGD

- Attach information required by *40 CFR § 125.86(b)*.

☐ Track II

- Attach information required by 40 CFR § 125.86(c).

Attachment: [Click to enter text.](#)

2. Phase II – Existing facility subject to 40 CFR Part 125, Subpart J

☐ Yes ☐ No

If **yes**, complete Worksheets 11.0 through 11.3, as applicable.

3. Phase III – New facility subject to 40 CFR Part 125, Subpart N

☐ Yes ☐ No

If **yes**, check the box next to the compliance track selection and provide the requested information.

☐ Track I – Fixed facility

- Attach information required by 40 CFR § 125.136(b) and complete Worksheet 11.0, Items 2 and 3, and Worksheet 11.2.

☐ Track I – Not a fixed facility

- Attach information required by 40 CFR § 125.136(b) and complete Worksheet 11.0, Item 2 (except CWIS latitude/longitude under Item 2.a).

☐ Track II – Fixed facility

- Attach information required by 40 CFR § 125.136(c) and complete Worksheet 11.0, Items 2 and 3.

Attachment: [Click to enter text.](#)

Item 13. Permit Change Requests (Instructions, Page 48)

This item is only applicable to existing permitted facilities.

a. Is the facility requesting a **major amendment** of an existing permit?

☐ Yes ☒ No

If **yes**, list each request individually and provide the following information: 1) detailed information regarding the scope of each request and 2) a justification for each request. Attach any supplemental information or additional data to support each request.

Click to enter text.

b. Is the facility requesting any **minor amendments** to the permit?

☐ Yes ☒ No

If **yes**, list and describe each change individually.

Click to enter text.

c. Is the facility requesting any **minor modifications** to the permit?

☐ Yes ☒ No

If **yes**, list and describe each change individually.

Click to enter text.

Item 14. Laboratory Accreditation (Instructions, Page 49)

All laboratory tests performed must meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification*, which includes the following general exemptions from National Environmental Laboratory Accreditation Program (NELAP) certification requirements:

- The laboratory is an in-house laboratory and is:
 - o periodically inspected by the TCEQ; or
 - o located in another state and is accredited or inspected by that state; or

- o performing work for another company with a unit located in the same site; or
- o performing pro bono work for a governmental agency or charitable organization.
- The laboratory is accredited under federal law.
- The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.
- The laboratory supplies data for which the TCEQ does not offer accreditation.

The applicant should review *30 TAC Chapter 25* for specific requirements.

The following certification statement shall be signed and submitted with every application. See the *Signature Page* section in the Instructions, for a list of designated representatives who may sign the certification.

CERTIFICATION:

I certify that all laboratory tests submitted with this application meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification*.

Printed Name: Katy Groom

Title: Manager of Environmental Regulatory Affairs

Signature: Katy Groom

Date: 6/29/24

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 1.0: EPA CATEGORICAL EFFLUENT GUIDELINES

This worksheet **is required** for all applications for TPDES permits for discharges of wastewaters subject to EPA categorical effluent limitation guidelines (ELGs).

Item 1. Categorical Industries (Instructions, Page 53)

Is this facility subject to any 40 CFR categorical ELGs outlined on page 53 of the instructions?

☐ Yes ☒ No

If **no**, this worksheet is not required. If **yes**, provide the appropriate information below.

40 CFR Effluent Guideline

Industry	40 CFR Part

Item 2. Production/Process Data (Instructions, Page 54)

NOTE: For all TPDES permit applications requesting individual permit coverage for discharges of oil and gas exploration and production wastewater (discharges into or adjacent to water in the state, falling under the Oil and Gas Extraction Effluent Guidelines – 40 CFR Part 435), see Worksheet 12.0, Item 2 instead.

a. Production Data

Provide appropriate data for effluent guidelines with production-based effluent limitations.

Production Data

Subcategory	Actual Quantity/Day	Design Quantity/Day	Units
N/A			

b. Organic Chemicals, Plastics, and Synthetic Fibers Manufacturing Data (40 CFR Part 414)

Provide each applicable subpart and the percent of total production. Provide data for metal-bearing and cyanide-bearing wastestreams, as required by *40 CFR Part 414, Appendices A and B*.

Percentage of Total Production

Subcategory	Percent of Total Production	Appendix A and B - Metals	Appendix A - Cyanide
N/A			

c. Refineries (40 CFR Part 419)

Provide the applicable subcategory and a brief justification.

Click to enter text.

Item 3. Process/Non-Process Wastewater Flows (Instructions, Page 54)

Provide a breakdown of wastewater flow(s) generated by the facility, including both process and non-process wastewater flow(s). Specify which wastewater flows are to be authorized for discharge under this permit and the disposal practices for wastewater flows, excluding domestic, which are not to be authorized for discharge under this permit.

Wastewater flows generated by the facility include stormwater and deluge water that flows from storage tanks on site through the deluge systems when activated for routine maintenance, fire and dust suppression during launch and test operations. Deluge system discharges would be authorized for discharge under this permit via discharge during the operation and from the retention ponds via discharge valve.

Item 4. New Source Determination (Instructions, Page 54)

Provide a list of all wastewater-generating processes subject to EPA categorical ELGs, identify the appropriate guideline Part and Subpart, and provide the date the process/construction commenced.

Wastewater Generating Processes Subject to Effluent Guidelines

Process	EPA Guideline Part	EPA Guideline Subpart	Date Process/ Construction Commenced
N/A			

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 2.0: POLLUTANT ANALYSIS

Worksheet 2.0 is **required** for all applications submitted for a TPDES permit. Worksheet 2.0 is not required for applications for a permit to dispose of all wastewater by land disposal or for discharges solely of stormwater associated with industrial activities.

Item 1. General Testing Requirements (Instructions, Page 55)

- Provide the date range of all sampling events conducted to obtain the analytical data submitted with this application (e.g., 05/01/2018-05/30/2018): 5/29/2024-6/6/2024
- ☒ Check the box to confirm all samples were collected no more than 12 months prior to the date of application submittal.
- Read the general testing requirements in the instructions for important information about sampling, test methods, and MALs. If a contact laboratory was used, attach a list which includes the name, contact information, and pollutants analyzed for each laboratory/firm.
Attachment: [Click to enter text.](#)

Item 2. Specific Testing Requirements (Instructions, Page 56)

Attach correspondence from TCEQ approving submittal of less than the required number of samples, if applicable. **Attachment:** [K SPL Laboratories Data](#)

TABLE 1 and TABLE 2 (Instructions, Page 58)

Completion of Tables 1 and 2 is required for all external outfalls for all TPDES permit applications.

Table 1 for Outfall No.: 001

Samples are (check one): ☐ Composite ☒ Grab

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
BOD (5-day)	8.49	3.56		
CBOD (5-day)	2.08	<2.00		
Chemical oxygen demand	<20.0	<20.0		
Total organic carbon	3.53	3.61		
Dissolved oxygen	NA	7.1		
Ammonia nitrogen	0.121	0.211		
Total suspended solids	7.50	7.10		
Nitrate nitrogen	1.20	1.20		
Total organic nitrogen	<0.050	0.161		
Total phosphorus	0.0241	0.017		
Oil and grease	3.60	<4.60		
Total residual chlorine	0.20	Negative		

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
Total dissolved solids	950	800		
Sulfate	282	281		
Chloride	182	197		
Fluoride	0.970	1.24		
Total alkalinity (mg/L as CaCO3)	136	106		
Temperature (°F)	28.1	38		
pH (standard units)	6.97	8.6		

Table 2 for Outfall No.: 001

Samples are (check one): ☐ Composite ☒ Grab

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (µg/L)
Aluminum, total	70.2	61.5			2.5
Antimony, total	1.89	1.12			5
Arsenic, total	1.88	0.0169			0.5
Barium, total	94.3	85			3
Beryllium, total	0	0			0.5
Cadmium, total	0.107	0			1
Chromium, total	1.55	0.282			3
Chromium, hexavalent	<3.00	25.9			3
Chromium, trivalent	0	0			N/A
Copper, total	9.49	0.0747			2
Cyanide, available	0	1.02			2/10
Lead, total	0	0			0.5
Mercury, total	113	0.139			0.005/0.0005
Nickel, total	6.26	0.0224			2
Selenium, total	2.86	0			5
Silver, total	0	0			0.5
Thallium, total	0	0.616			0.5
Zinc, total	1420	4.3			5.0

TABLE 3 (Instructions, Page 58)

Completion of Table 3 is required for all **external outfalls** which discharge process wastewater.

Partial completion of Table 3 is required for all **external outfalls** which discharge non-process wastewater and stormwater associated with industrial activities commingled with other wastestreams (see instructions for additional guidance).

Table 3 for Outfall No.: 001

Samples are (check one): ☐ Composite ☒ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Acrylonitrile	<1.00	<1.00			50
Anthracene	<0.988	<1.06			10
Benzene	<1.00	<1.00			10
Benidine	<1.48	<1.60			50
Benzo(a)anthracene	<0.988	<1.06			5
Benzo(a)pyrene	<0.988	<1.06			5
Bis(2-chloroethyl)ether	<0.988	<1.06			10
Bis(2-ethylhexyl)phthalate	<7.41	<7.99			10
Bromodichloromethane [Dichlorobromomethane]	<1.00	<1.00			10
Bromoform	<1.00	<1.00			10
Carbon tetrachloride	<1.00	<1.00			2
Chlorobenzene	<1.00	<1.00			10
Chlorodibromomethane [Dibromochloromethane]	<1.00	<1.00			10
Chloroform	<1.00	<1.00			10
Chrysene	<0.988	<1.06			5
m-Cresol [3-Methylphenol]	<7.91	<8.52			10
o-Cresol [2-Methylphenol]	<9.88	<10.0			10
p-Cresol [4-Methylphenol]	<7.91	<8.52			10
1,2-Dibromoethane	<1.00	<1.00			10
m-Dichlorobenzene [1,3-Dichlorobenzene]	<1.00	<1.00			10
o-Dichlorobenzene [1,2-Dichlorobenzene]	<1.00	<1.00			10
p-Dichlorobenzene [1,4-Dichlorobenzene]	<1.00	<1.00			10
3,3'-Dichlorobenzidine	<1.97	<2.13			5
1,2-Dichloroethane	<1.00	<1.00			10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
1,1-Dichloroethene [1,1-Dichloroethylene]	<1.00	<1.00			10
Dichloromethane [Methylene chloride]	<1.02	<1.02			20
1,2-Dichloropropane	<1.00	<1.00			10
1,3-Dichloropropene [1,3-Dichloropropylene]	<1.00	<1.00			10
2,4-Dimethylphenol	<0.988	<1.06			10
Di-n-Butyl phthalate	<7.41	<7.99			10
Ethylbenzene	<1.00	<1.00			10
Fluoride	970	1240			500
Hexachlorobenzene	<0.988	<1.06			5
Hexachlorobutadiene	<1.02	<1.10			10
Hexachlorocyclopentadiene	<0.988	<1.06			10
Hexachloroethane	<1.98	<2.13			20
Methyl ethyl ketone	<1.00	<1.00			50
Nitrobenzene	<0.988	<1.06			10
N-Nitrosodiethylamine	<0.988	<1.06			20
N-Nitroso-di-n-butylamine	<0.988	<1.06			20
Nonylphenol	<33.6	<34.8			333
Pentachlorobenzene	<0.988	<1.06			20
Pentachlorophenol	<4.94	<5.00			5
Phenanthrene	<0.988	<1.06			10
Polychlorinated biphenyls (PCBs) (**)	<0.334	<0.197			0.2
Pyridine	<1.33	<1.44			20
1,2,4,5-Tetrachlorobenzene	<1.02	<1.10			20
1,1,2,2-Tetrachloroethane	<1.00	<1.00			10
Tetrachloroethene [Tetrachloroethylene]	<1.00	<1.00			10
Toluene	<1.00	<1.00			10
1,1,1-Trichloroethane	<1.00	<1.00			10
1,1,2-Trichloroethane	<1.00	<1.00			10
Trichloroethene [Trichloroethylene]	<1.00	<1.00			10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
2,4,5-Trichlorophenol	<4.94	<5.32			50
TTHM (Total trihalomethanes)	0	0			10
Vinyl chloride	<1.00	<1.00			10

(*) Indicate units if different from µg/L.

(**) Total of detects for PCB-1242, PCB-1254, PCB-1221, PCB-1232, PCB-1248, PCB-1260, and PCB-1016. If all non-detects, enter the highest non-detect preceded by a "<".

TABLE 4 (Instructions, Pages 58-59)

Partial completion of Table 4 **is required** for each **external outfall** based on the conditions below.

a. Tributyltin

Is this facility an industrial/commercial facility which currently or proposes to directly dispose of wastewater from the types of operations listed below or a domestic facility which currently or proposes to receive wastewater from the types of industrial/commercial operations listed below?

☐ Yes ☒ No

If **yes**, check the box next to each of the following criteria which apply and provide the appropriate testing results in Table 4 below (check all that apply).

- ☐ Manufacturers and formulators of tributyltin or related compounds.
- ☐ Painting of ships, boats and marine structures.
- ☐ Ship and boat building and repairing.
- ☐ Ship and boat cleaning, salvage, wrecking and scaling.
- ☐ Operation and maintenance of marine cargo handling facilities and marinas.
- ☐ Facilities engaged in wood preserving.
- ☐ Any other industrial/commercial facility for which tributyltin is known to be present, or for which there is any reason to believe that tributyltin may be present in the effluent.

b. Enterococci (discharge to saltwater)

This facility discharges/proposes to discharge directly into saltwater receiving waters **and** Enterococci bacteria are expected to be present in the discharge based on facility processes.

☐ Yes ☒ No

Domestic wastewater is/will be discharged.

☐ Yes ☒ No

If **yes to either** question, provide the appropriate testing results in Table 4 below.

c. **E. coli (discharge to freshwater)**

This facility discharges/proposes to discharge directly into freshwater receiving waters **and** *E. coli* bacteria are expected to be present in the discharge based on facility processes.

☐ Yes ☒ No

Domestic wastewater is/will be discharged.

☐ Yes ☒ No

If **yes to either** question, provide the appropriate testing results in Table 4 below.

Table 4 for Outfall No.: [Click to enter text.](#) Samples are (check one): ☐ Composite ☐ Grab

Pollutant	Sample 1	Sample 2	Sample 3	Sample 4	MAL
Tributyltin (µg/L)					0.010
Enterococci (cfu or MPN/100 mL)					N/A
<i>E. coli</i> (cfu or MPN/100 mL)					N/A

TABLE 5 (Instructions, Page 59)

Completion of Table 5 **is required** for all **external outfalls** which discharge process wastewater from a facility which manufactures or formulates pesticides or herbicides or other wastewaters which may contain pesticides or herbicides.

If this facility does not/will not manufacture or formulate pesticides or herbicides and does not/will not discharge other wastewaters that may contain pesticides or herbicides, check N/A.

☒ N/A

Table 5 for Outfall No.: [Click to enter text.](#) Samples are (check one): ☐ Composite ☐ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Aldrin					0.01
Carbaryl					5
Chlordane					0.2
Chlorpyrifos					0.05
4,4'-DDD					0.1
4,4'-DDE					0.1
4,4'-DDT					0.02
2,4-D					0.7
Danitol [Fenpropathrin]					—
Demeton					0.20
Diazinon					0.5/0.1
Dicofol [Kelthane]					1
Dieldrin					0.02
Diuron					0.090

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Endosulfan I (<i>alpha</i>)					0.01
Endosulfan II (<i>beta</i>)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Guthion [Azinphos methyl]					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
Hexachlorocyclohexane (<i>alpha</i>)					0.05
Hexachlorocyclohexane (<i>beta</i>)					0.05
Hexachlorocyclohexane (<i>gamma</i>) [Lindane]					0.05
Hexachlorophene					10
Malathion					0.1
Methoxychlor					2.0
Mirex					0.02
Parathion (ethyl)					0.1
Toxaphene					0.3
2,4,5-TP [Silvex]					0.3

* Indicate units if different from µg/L.

TABLE 6 (Instructions, Page 59)

Completion of Table 6 is required for all external outfalls.

Table 6 for Outfall No.: 001

Samples are (check one): ☐ Composite ☒ Grab

Pollutants	Believed Present	Believed Absent	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)	MAL (µg/L)*
Bromide	☐	☒					400
Color (PCU)	☐	☒					—
Nitrate-Nitrite (as N)	☐	☒					—
Sulfide (as S)	☐	☒					—
Sulfite (as SO ₃)	☐	☒					—
Surfactants	☐	☒					—
Boron, total	☐	☒					20
Cobalt, total	☐	☒					0.3
Iron, total	☒	☐	0.702	0.199			7
Magnesium, total	☐	☒					20
Manganese, total	☒	☐	0.059	0.0163			0.5
Molybdenum, total	☐	☒					1
Tin, total	☐	☒					5
Titanium, total	☐	☒					30

TABLE 7 (Instructions, Page 60)

Check the box next to any of the industrial categories applicable to this facility. If no categories are applicable, check N/A. If GC/MS testing is required, check the box provided to confirm the testing results for the appropriate parameters are provided with the application.

☒ N/A

Table 7 for Applicable Industrial Categories

Industrial Category	40 CFR Part	Volatiles Table 8	Acids Table 9	Bases/Neutrals Table 10	Pesticides Table 11
☐ Adhesives and Sealants		☐ Yes	☐ Yes	☐ Yes	No
☐ Aluminum Forming	467	☐ Yes	☐ Yes	☐ Yes	No
☐ Auto and Other Laundries		☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Battery Manufacturing	461	☐ Yes	No	☐ Yes	No
☐ Coal Mining	434	No	No	No	No
☐ Coil Coating	465	☐ Yes	☐ Yes	☐ Yes	No
☐ Copper Forming	468	☐ Yes	☐ Yes	☐ Yes	No
☐ Electric and Electronic Components	469	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Electroplating	413	☐ Yes	☐ Yes	☐ Yes	No
☐ Explosives Manufacturing	457	No	☐ Yes	☐ Yes	No
☐ Foundries		☐ Yes	☐ Yes	☐ Yes	No
☐ Gum and Wood Chemicals - Subparts A,B,C,E	454	☐ Yes	☐ Yes	No	No
☐ Gum and Wood Chemicals - Subparts D,F	454	☐ Yes	☐ Yes	☐ Yes	No
☐ Inorganic Chemicals Manufacturing	415	☐ Yes	☐ Yes	☐ Yes	No
☐ Iron and Steel Manufacturing	420	☐ Yes	☐ Yes	☐ Yes	No
☐ Leather Tanning and Finishing	425	☐ Yes	☐ Yes	☐ Yes	No
☐ Mechanical Products Manufacturing		☐ Yes	☐ Yes	☐ Yes	No
☐ Nonferrous Metals Manufacturing	421,471	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Oil and Gas Extraction - Subparts A, D, E, F, G, H	435	☐ Yes	☐ Yes	☐ Yes	No
☐ Ore Mining - Subpart B	440	No	☐ Yes	No	No
☐ Organic Chemicals Manufacturing	414	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Paint and Ink Formulation	446,447	☐ Yes	☐ Yes	☐ Yes	No
☐ Pesticides	455	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Petroleum Refining	419	☐ Yes	No	No	No
☐ Pharmaceutical Preparations	439	☐ Yes	☐ Yes	☐ Yes	No
☐ Photographic Equipment and Supplies	459	☐ Yes	☐ Yes	☐ Yes	No
☐ Plastic and Synthetic Materials Manufacturing	414	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Plastic Processing	463	☐ Yes	No	No	No
☐ Porcelain Enameling	466	No	No	No	No
☐ Printing and Publishing		☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Pulp and Paperboard Mills - Subpart C	430	☐ *	☐ Yes	☐ *	☐ Yes
☐ Pulp and Paperboard Mills - Subparts F, K	430	☐ *	☐ Yes	☐ *	☐ *
☐ Pulp and Paperboard Mills - Subparts A, B, D, G, H	430	☐ Yes	☐ Yes	☐ *	☐ *
☐ Pulp and Paperboard Mills - Subparts I, J, L	430	☐ Yes	☐ Yes	☐ *	☐ Yes
☐ Pulp and Paperboard Mills - Subpart E	430	☐ Yes	☐ Yes	☐ Yes	☐ *
☐ Rubber Processing	428	☐ Yes	☐ Yes	☐ Yes	No
☐ Soap and Detergent Manufacturing	417	☐ Yes	☐ Yes	☐ Yes	No
☐ Steam Electric Power Plants	423	☐ Yes	☐ Yes	No	No
☐ Textile Mills (Not Subpart C)	410	☐ Yes	☐ Yes	☐ Yes	No
☐ Timber Products Processing	429	☐ Yes	☐ Yes	☐ Yes	☐ Yes

* Test if believed present.

TABLES 8, 9, 10, and 11 (Instructions, Page 60)

Completion of Tables 8, 9, 10, and 11 **is required** as specified in Table 7 for all **external outfalls** that contain process wastewater.

Completion of Tables 8, 9, 10, and 11 **may be required** for types of industry not specified in Table 7 for specific parameters that are believed to be present in the wastewater.

Table 8 for Outfall No.: N/A

Samples are (check one): ☐ Composite ☐ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Acrolein					50
Acrylonitrile					50
Benzene					10
Bromoform					10
Carbon tetrachloride					2
Chlorobenzene					10
Chlorodibromomethane					10
Chloroethane					50
2-Chloroethylvinyl ether					10
Chloroform					10
Dichlorobromomethane [Bromodichloromethane]					10
1,1-Dichloroethane					10
1,2-Dichloroethane					10
1,1-Dichloroethylene [1,1-Dichloroethene]					10
1,2-Dichloropropane					10
1,3-Dichloropropylene [1,3-Dichloropropene]					10
Ethylbenzene					10
Methyl bromide [Bromomethane]					50
Methyl chloride [Chloromethane]					50
Methylene chloride [Dichloromethane]					20
1,1,2,2-Tetrachloroethane					10
Tetrachloroethylene [Tetrachloroethene]					10
Toluene					10
1,2-Trans-dichloroethylene [1,2-Trans-dichloroethene]					10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
1,1,1-Trichloroethane					10
1,1,2-Trichloroethane					10
Trichloroethylene [Trichloroethene]					10
Vinyl chloride					10

* Indicate units if different from µg/L.

Table 9 for Outfall No.: N/A

Samples are (check one): ☐ Composite ☐ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
2-Chlorophenol					10
2,4-Dichlorophenol					10
2,4-Dimethylphenol					10
4,6-Dinitro-o-cresol					50
2,4-Dinitrophenol					50
2-Nitrophenol					20
4-Nitrophenol					50
p-Chloro-m-cresol					10
Pentachlorophenol					5
Phenol					10
2,4,6-Trichlorophenol					10

* Indicate units if different from µg/L.

Table 10 for Outfall No.: N/A

Samples are (check one): ☐ Composite ☐ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Acenaphthene					10
Acenaphthylene					10
Anthracene					10
Benzidine					50
Benzo(a)anthracene					5
Benzo(a)pyrene					5
3,4-Benzofluoranthene [Benzo(b)fluoranthene]					10
Benzo(ghi)perylene					20
Benzo(k)fluoranthene					5
Bis(2-chloroethoxy)methane					10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Bis(2-chloroethyl)ether					10
Bis(2-chloroisopropyl)ether					10
Bis(2-ethylhexyl)phthalate					10
4-Bromophenyl phenyl ether					10
Butylbenzyl phthalate					10
2-Chloronaphthalene					10
4-Chlorophenyl phenyl ether					10
Chrysene					5
Dibenzo(a,h)anthracene					5
1,2-Dichlorobenzene [o-Dichlorobenzene]					10
1,3-Dichlorobenzene [m-Dichlorobenzene]					10
1,4-Dichlorobenzene [p-Dichlorobenzene]					10
3,3'-Dichlorobenzidine					5
Diethyl phthalate					10
Dimethyl phthalate					10
Di-n-butyl phthalate					10
2,4-Dinitrotoluene					10
2,6-Dinitrotoluene					10
Di-n-octyl phthalate					10
1,2-Diphenylhydrazine (as Azobenzene)					20
Fluoranthene					10
Fluorene					10
Hexachlorobenzene					5
Hexachlorobutadiene					10
Hexachlorocyclopentadiene					10
Hexachloroethane					20
Indeno(1,2,3-cd)pyrene					5
Isophorone					10
Naphthalene					10
Nitrobenzene					10
N-Nitrosodimethylamine					50

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
N-Nitrosodi-n-propylamine					20
N-Nitrosodiphenylamine					20
Phenanthrene					10
Pyrene					10
1,2,4-Trichlorobenzene					10

* Indicate units if different from µg/L.

Table 11 for Outfall No.: N/A

Samples are (check one): ☐ Composite ☐ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Aldrin					0.01
alpha-BHC [alpha-Hexachlorocyclohexane]					0.05
beta-BHC [beta-Hexachlorocyclohexane]					0.05
gamma-BHC [gamma-Hexachlorocyclohexane]					0.05
delta-BHC [delta-Hexachlorocyclohexane]					0.05
Chlordane					0.2
4,4'-DDT					0.02
4,4'-DDE					0.1
4,4'-DDD					0.1
Dieldrin					0.02
Endosulfan I (alpha)					0.01
Endosulfan II (beta)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Endrin aldehyde					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
PCB 1242					0.2
PCB 1254					0.2
PCB 1221					0.2
PCB 1232					0.2
PCB 1248					0.2

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
PCB 1260					0.2
PCB 1016					0.2
Toxaphene					0.3

* Indicate units if different from µg/L.

Attachment: N/A

TABLE 12 (DIOXINS/FURAN COMPOUNDS)

Complete of Table 12 **is required** for **external outfalls**, as directed below. (Instructions, Pages 59-60)

Indicate which compound(s) are manufactured or used at the facility and provide a brief description of the conditions of its/their presence at the facility (check all that apply).

- ☐ 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) CASRN 93-76-5
- ☐ 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) CASRN 93-72-1
- ☐ 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) CASRN 136-25-4
- ☐ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnell) CASRN 299-84-3
- ☐ 2,4,5-trichlorophenol (TCP) CASRN 95-95-4
- ☐ hexachlorophene (HCP) CASRN 70-30-4
- ☐ None of the above

Description: N/A

Does the applicant or anyone at the facility know or have any reason to believe that 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) or any congeners of TCDD may be present in the effluent proposed for discharge?

- ☐ Yes ☒ No

Description: Click to enter text.

If **yes** to either Items a **or** b, complete Table 12 as instructed.

Table 12 for Outfall No.: N/A

Samples are (check one): ☐ Composite ☐ Grab

Compound	Toxicity Equivalent Factors	Wastewater Concentration (ppq)	Wastewater Toxicity Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Toxicity Equivalents (ppt)	MAL (ppq)
2,3,7,8-TCDD	1					10
1,2,3,7,8-PeCDD	1.0					50
2,3,7,8-HxCDDs	0.1					50
1,2,3,4,6,7,8-HpCDD	0.01					50

Compound	Toxicity Equivalent Factors	Wastewater Concentration (ppq)	Wastewater Toxicity Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Toxicity Equivalents (ppt)	MAL (ppq)
2,3,7,8-TCDF	0.1					10
1,2,3,7,8-PeCDF	0.03					50
2,3,4,7,8-PeCDF	0.3					50
2,3,7,8-HxCDFs	0.1					50
2,3,4,7,8-HpCDFs	0.01					50
OCDD	0.0003					100
OCDF	0.0003					100
PCB 77	0.0001					500
PCB 81	0.0003					500
PCB 126	0.1					500
PCB 169	0.03					500
Total						

TABLE 13 (HAZARDOUS SUBSTANCES)

Complete Table 13 **is required** for all **external outfalls** as directed below. (Instructions, Pages 60-61)

Are there any pollutants listed in the instructions (pages 55-62) believed present in the discharge?

☐ Yes ☒ No

Are there pollutants listed in Item 1.c. of Technical Report 1.0 which are believed present in the discharge and have not been analytically quantified elsewhere in this application?

☐ Yes ☒ No

If **yes** to either Items a or b, complete Table 13 as instructed.

Table 13 for Outfall No.: [Click to enter text.](#) Samples are (check one): ☐ Composite ☐ Grab

Pollutant	CASRN	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	Analytical Method

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 3.0: LAND APPLICATION OF EFFLUENT

This worksheet **is required** for all applications for a permit to disposal of wastewater by land application (i.e., TLAP)).

Item 1. Type of Disposal System (Instructions, Page 69)

Check the box next to the type of land disposal requested by this application:

☐ Irrigation	☐ Subsurface application
☐ Evaporation	☐ Subsurface soils absorption
☐ Evapotranspiration beds	☐ Surface application
☐ Drip irrigation system	☐ Other, specify: Click to enter text.

Item 2. Land Application Area (Instructions, Page 69)

Land Application Area Information

Effluent Application (gallons/day)	Irrigation Acreage (acres)	Describe land use & indicate type(s) of crop(s)	Public Access? (Y/N)
N/A			

Item 3. Annual Cropping Plan (Instructions, Page 69)

Attach the required cropping plan that includes each of the following:

- Cool and warm season plant species
- Breakdown of acreage and percent of total acreage for each crop
- Crop growing season
- Harvesting method/number of harvests
- Minimum/maximum harvest height
- Crop yield goals
- Soils map
- Nitrogen requirements per crop
- Additional fertilizer requirements
- Supplemental watering requirements
- Crop salt tolerances
- Justification for not removing existing vegetation to be irrigated

Attachment:

Item 4. Well and Map Information (Instructions, Page 70)

- a. Check each box to confirm the required information is shown and labeled on the attached USGS map:

- ☐ The exact boundaries of the land application area
- ☐ On-site buildings
- ☐ Waste-disposal or treatment facilities
- ☐ Effluent storage and tailwater control facilities
- ☐ Buffer zones
- ☐ All surface waters in the state onsite and within 500 feet of the property boundaries
- ☐ All water wells within ½-mile of the disposal site, wastewater ponds, or property boundaries
- ☐ All springs and seeps onsite and within 500 feet of the property boundaries

Attachment: N/A

- b. List and cross reference all water wells located on or within 500 feet of the disposal site, wastewater ponds, or property boundaries in the following table. Attach additional pages as necessary to include all of the wells.

Well and Map Information Table

Well ID	Well Use	Producing? Y/N/U	Open, cased, capped, or plugged?	Proposed Best Management Practice
N/A				

Attachment: Click to enter text.

- c. Groundwater monitoring wells or lysimeters are/will be installed around the land application site or wastewater ponds.

☐ Yes ☒ No

If **yes**, provide the existing/proposed location of the monitoring wells or lysimeters on the site map attached for Item 4.a. Additionally, attach information on the depth of the wells or lysimeters, sampling schedule, and monitoring parameters for TCEQ review, possible modification, and approval.

Attachment: Click to enter text.

- d. Attach a short groundwater technical report using *30 TAC § 309.20(a)(4)* as guidance.

Attachment:

Item 5. Soil Map and Soil Information (Instructions, Page 71)

Check each box to confirm that the following information is attached:

- ☐ USDA NRCS Soil Survey Map depicting the area to be used for land application with the locations identified by fields and crops.
- ☐ Breakdown of acreage and percent of total acreage for each soil type.
- ☐ Copies of laboratory soil analyses. **Attachment:** [Click to enter text.](#)

Item 6. Effluent Monitoring Data (Instructions, Page 72)

- a. Completion of Table 14 **is required** for all **renewal** and **major amendment** applications. Complete the table with monitoring data for the previous two years for all parameters regulated in the current permit. An additional table has been provided with blank headers for parameters regulated in the current permit which are not listed in Table 14.

Table 14 for Outfall No.: Samples are (check one): ☐ Composite ☐ Grab

[illegible]

Item 7. Pollutant Analysis (Instructions, Page 72)

- Provide the date range of all sampling events conducted to obtain the analytical data submitted with this application (e.g., 05/01/2018-05/30/2018): 5/29/2024-6/6/2024
- ☒ Check the box to confirm all samples were collected no more than 12 months prior to the date of application submittal.
- Complete Tables 15 and 16.

Table 15 for Outfall No.: 001

Samples are (check one): ☐ Composite ☒ Grab

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
BOD (5-day)	8.49	3.56		
CBOD (5-day)	2.05	<2.00		
Chemical oxygen demand	<20.0	<20.0		
Total organic carbon	3.53	3.61		
Dissolved oxygen	NA	7.1		
Ammonia nitrogen	121	211		
Total suspended solids	7.50	7.10		
Nitrate nitrogen	1.20	1.20		
Total organic nitrogen	50	0.161		
Total phosphorus	0.0241	170		
Oil and grease	3.60	<4.60		
Total residual chlorine	0.20	Negative		
Total dissolved solids	950	800		
Sulfate	2820	281		
Chloride	1820	197		
Fluoride	970	1.24		
Total alkalinity (mg/L as CaCO ₃)	136	106		
Temperature (°F)	28.1	38		
pH (standard units)	6.97	8.6		

Table 16 for Outfall No.: 001

Samples are (check one): ☐ Composite ☒ Grab

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (µg/L)
Aluminum, total	70.2	6.15			2.5
Antimony, total	1.89	1.12			5
Arsenic, total	1.88	0.0169			0.5
Barium, total	94.3	85			3

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (µg/L)
Beryllium, total	0	0			0.5
Cadmium, total	0.107	0			1
Chromium, total	1.55	0.000282			3
Chromium, hexavalent	0	25.9			3
Chromium, trivalent	0	0			N/A
Copper, total	9.49	0.0747			2
Cyanide, available	0	3.4			2/10
Lead, total	0	0			0.5
Mercury, total	<0.113	139			0.005/0.0005
Nickel, total	6.26	0.0224			2
Selenium, total	28.6	0			5
Silver, total	0	0			0.5
Thallium, total	0	0.616			0.5
Zinc, total	1420	4.3			5.0

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 3.1: SURFACE LAND APPLICATION AND APPLICATION

This worksheet **is required** for all applications for a permit to disposal of wastewater by surface land application or evaporation.

Item 1. Edwards Aquifer (Instructions, Page 73)

a. Is the facility subject to *30 TAC Chapter 213*, Edwards Aquifer Rules?

☐ Yes ☒ No

If **no**, proceed to Item 2. If **yes**, complete Items 1.b and 1.c.

b. Check the box next to the subchapter applicable to the facility.

☐ 30 TAC Chapter 213, Subchapter A

☐ 30 TAC Chapter 213, Subchapter B

c. If *30 TAC Chapter 213, Subchapter A* applies, attach **either**: 1) a Geologic Assessment (if conducted in accordance with *30 TAC § 213.5*) **or** 2) a report that contains the following:

- A description of the surface geological units within the proposed land application site and wastewater pond area.
- The location and extent of any sensitive recharge features in the land application site and wastewater pond area
- A list of any proposed BMPs to protect the recharge features.

Attachment: [Click to enter text.](#)

Item 2. Surface Spray/Irrigation (Instructions, Page 73)

a. Provide the following information on the irrigation operations:

Area under irrigation (acres): N/A

Design application rate (acre-ft/acre/yr): N/A

Design application frequency (hours/day): N/A

Design application frequency (days/week): N/A

Design total nitrogen loading rate (lbs nitrogen/acre/year): N/A

Average slope of the application area (percent): N/A

Maximum slope of the application area (percent): N/A

Irrigation efficiency (percent): N/A

Effluent conductivity (mmhos/cm): N/A

Soil conductivity (mmhos/cm): N/A

Curve number: N/A

Describe the application method and equipment: N/A

- b. Attach a detailed engineering report which includes a water balance, storage volume calculations, and a nitrogen balance. **Attachment:** N/A

Item 3. Evaporation Ponds (Instructions, Page 74)

- a. Daily average effluent flow into ponds: N/A gallons per day
- b. Attach a separate engineering report of evaporation calculations for average long-term and worst-case critical conditions. **Attachment:** N/A

Item 4. Evapotranspiration Beds (Instructions, Page 74)

- a. Provide the following information on the evapotranspiration beds:
 - Number of beds: N/A
 - Area of bed(s) (acres): N/A
 - Depth of bed(s) (feet): N/A
 - Void ratio of soil in the beds: N/A
 - Storage volume within the beds (include units): N/A
 - Description of any lining to protect groundwater: N/A
- b. Attach a certification by a licensed Texas professional engineer that the liner meets TCEQ requirements. **Attachment:** N/A
- c. Attach a separate engineering report with water balance, storage volume calculations, and description of the liner. **Attachment:** N/A

Item 5. Overland Flow (Instructions, Page 74)

- a. Provide the following information on the overland flow:
 - Area used for application (acres): N/A
 - Slopes for application area (percent): N/A
 - Design application rate (gpm/foot of slope width): N/A
 - Slope length (feet): N/A
 - Design BOD5 loading rate (lbs BOD5/acre/day): N/A
 - Design application frequency (hours/day): N/A
 - Design application frequency (days/week): N/A
- b. Attach a separate engineering report with the method of application and design requirements according to 30 TAC § 217.212. **Attachment:** N/A

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 3.2: SUBSURFACE IRRIGATION (NON-DRIP)

This worksheet **is required** for all applications for a permit to disposal of wastewater by subsurface land application.

- ☐ Check the box to confirm the Class V Injection Well Inventory/Authorization Form (Worksheet 9.0) has been submitted to the TCEQ UIC Permits Team as directed.

Item 1. Edwards Aquifer (Instructions, Page 75)

- a. The subsurface system is/will be located on the Edwards Aquifer Recharge Zone, as mapped by TCEQ?
- ☐ Yes ☒ No
- b. The subsurface system is/will be located on the Edwards Aquifer Transition Zone, as mapped by TCEQ?
- ☐ Yes ☒ No

If **yes** to Item 1.a **or** 1.b, the subsurface system may be prohibited by *30 TAC § 213.8*. Contact the Water Quality Assessment Section at (512) 239-4671 for a preapplication meeting.

Item 2. Subsurface Application (Instructions, Page 75)

- a. Check the box next to the type of subsurface land disposal system requested:
- ☐ Conventional drainfield, beds, or trenches
- ☐ Low pressure dosing
- ☐ Other: [Click to enter text.](#)
- b. Provide the following information on the irrigation operations:
- Application area (acres): [Click to enter text.](#)
- Area of drainfield (square feet): [Click to enter text.](#)
- Application rate (gal/square ft/day): [Click to enter text.](#)
- Depth to groundwater (feet): [Click to enter text.](#)
- Area of trench (square feet): [Click to enter text.](#)
- Dosing duration per area (hours): [Click to enter text.](#)
- Number of beds: [Click to enter text.](#)
- Dosing amount per area (inches/day): [Click to enter text.](#)
- Soil infiltration rate (inches/hour): [Click to enter text.](#)
- Storage volume (gallons): [Click to enter text.](#)
- Area of bed(s) (square feet): [Click to enter text.](#)
- Soil classification: [Click to enter text.](#)
- c. Attach a separate engineering report using *30 TAC § 309.20, Subchapter C, Land Disposal of Sewage Effluent* as guidance, excluding items b(3)(A) and b(3)(B). Include a description of the schedule of dosing basin rotation. **Attachment:** [Click to enter text.](#)

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 3.3: SUBSURFACE AREA DRIP DISPERSAL SYSTEMS

This worksheet **is required** for all applications for a permit to dispose of wastewater using a subsurface area drip dispersal system (SADDS).

- ☐ Check the box to confirm the Class V Injection Well Inventory/Authorization Form (Worksheet 9.0) has been submitted to the TCEQ UIC Permits Team as directed.

Item 1. Edwards Aquifer (Instructions, Page 76)

- a. The subsurface system is/will be located on the Edwards Aquifer Recharge Zone, as mapped by TCEQ?
- ☐ Yes ☒ No
- b. The subsurface system is/will be located on the Edwards Aquifer Transition Zone, as mapped by TCEQ?
- ☐ Yes ☒ No

If **yes** to Item 1.a **or** 1.b, the subsurface system may be prohibited by *30 TAC § 213.8*. Contact the Water Quality Assessment Section at (512) 239-4671 for a preapplication meeting.

Item 2. Administrative Information (Instructions, Page 76)

- a. Provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the treatment facility: N/A
- b. The owner of the land where the WWTF is/will be located is the same as the owner of the WWTF.
- ☐ Yes ☐ No

If **no**, provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the land where the WWTF is/will be located:

[Click to enter text.](#)

- c. Provide the legal name of the owner of the SADDS: [Click to enter text.](#)
- d. The owner of the SADDS is the same as the owner of the WWTF or the site where the WWTF is/will be located.
- ☐ Yes ☐ No

If **no**, identify the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in Item 1.c: [Click to enter text.](#)

- e. Provide the legal name of the owner of the land where the SADDS is located: [Click to enter text.](#)

- f. The owner of the land where the SADDs is/will be located is the same as owner of the WWTF, the site where the WWTF is located, or the owner of the SADDs.

☐ Yes ☐ No

If **no**, provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in item 1.e: [Click to enter text.](#)

Item 3. SADDs (Instructions, Page 77)

- a. Check the box next to the type SADDs requested by this application:

☐ Subsurface drip/trickle irrigation
☐ Surface drip irrigation
☐ Other: [Click to enter text.](#)

- b. Attach a description of the SADDs proposed/used by the facility (see instructions for guidance). **Attachment:** [Click to enter text.](#)

- c. Provide the following information on the SADDs:

Application area (acres): [Click to enter text.](#)

Soil infiltration rate (inches/hour): [Click to enter text.](#)

Average slope of the application area: [Click to enter text.](#)

Maximum slope of the application area: [Click to enter text.](#)

Storage volume (gallons): [Click to enter text.](#)

Major soil series: [Click to enter text.](#)

Depth to groundwater (feet): [Click to enter text.](#)

Effluent conductivity (mmhos/cm): [Click to enter text.](#)

- d. The facility is/will be located west of the boundary shown in 30 TAC § 222.83 **and** using a vegetative cover of non-native grasses over seeded with cool-season grasses.

☐ Yes ☐ No

If **yes**, the facility may propose a hydraulic application rate up to, but not to exceed, 0.1 gal/ft²/day.

- e. The facility is/will be located east of the boundary shown in 30 TAC § 222.83 **or** is the facility proposing any crop other than non-native grasses.

☐ Yes ☐ No

If **yes**, the facility must use the formula in 30 TAC § 222.83 to calculate the maximum hydraulic application rate.

- f. The facility has or plans to submit an alternative method to calculate the hydraulic application rate for approval by the ED.

☐ Yes ☐ No

If **yes**, provide the following information on the hydraulic application rates:

- Hydraulic application rate (gal/square foot/day): [Click to enter text.](#)
- Nitrogen application rate (gal/square foot/day): [Click to enter text.](#)

g. Provide the following dosing information:

Number of doses per day: [Click to enter text.](#)

Dosing duration per area (hours): [Click to enter text.](#)

Rest period between doses (hours): [Click to enter text.](#)

Dosing amount per area (inches/day): [Click to enter text.](#)

Number of zones: [Click to enter text.](#)

h. The system is/will be a surface drip irrigation system using existing native vegetation as a crop?

☐ Yes ☐ No

If **yes**, attach the following information:

- A vegetation survey by a certified arborist describing the percent canopy cover and relative percentage of major overstory and understory plant species.
Attachment: [Click to enter text.](#)
- Attach a separate engineering report using *30 TAC § 309.20, Subchapter C, Land Disposal of Sewage Effluent* as guidance, excluding items b(3)(A) and b(3)(B). Include a description of the schedule of dosing basin rotation.
Attachment: [Click to enter text.](#)

Item 4. Required Plans (Instructions, Page 78)

a. Attach a Soil Evaluation with all information required in *30 TAC § 222.73*.

Attachment: [Click to enter text.](#)

b. Attach a Site Preparation Plan with all information required in *30 TAC § 222.75*.

Attachment: [Click to enter text.](#)

c. Attach a Recharge Feature Plan with all information required in *30 TAC § 222.79*.

Attachment: [Click to enter text.](#)

d. Provide soil sampling and testing with all information required in *30 TAC § 222.157*.

Attachment: [Click to enter text.](#)

Item 5. Flood and Run-On Protection (Instructions, Page 79)

a. Is the existing/proposed SADDs located within the 100-year frequency flood level?

☐ Yes ☐ No

Source: [Click to enter text.](#)

If **yes**, describe how the site will be protected from inundation: [Click to enter text.](#)

b. Is the existing/proposed SADDs within a designated floodway?

☐ Yes ☐ No

If **yes**, attach either the FEMA flood map or alternate information used to make this determination. **Attachment:** [Click to enter text.](#)

Item 6. Surface Waters in The State (Instructions, Page 79)

a. Attach a buffer map which shows the appropriate buffers on surface waters in the state, water wells, and springs/seeps. **Attachment:** [Click to enter text.](#)

b. The facility has or plans to request a buffer variance from water wells or waters in the state?

☐ Yes ☐ No

If **yes**, attach the additional information required in *30 TAC § 222.81(c)*. **Attachment:** [Click to enter text.](#)

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 4.0: RECEIVING WATERS

This worksheet **is required** for all TPDES permit applications.

Item 1. Domestic Drinking Water Supply (Instructions, Page 80)

- a. There is a surface water intake for domestic drinking water supply located within 5 (five) miles downstream from the point/proposed point of discharge.

☐ Yes ☒ No

If **no**, stop here and proceed to Item 2. If **yes**, provide the following information:

1. The legal name of the owner of the drinking water supply intake: [Click to enter text.](#)
2. The distance and direction from the outfall to the drinking water supply intake: [Click to enter text.](#)

- b. Locate and identify the intake on the USGS 7.5-minute topographic map provided for Administrative Report 1.0.

☐ Check this box to confirm the above requested information is provided.

Item 2. Discharge Into Tidally Influenced Waters (Instructions, Page 80)

If the discharge is to tidally influenced waters, complete this section. Otherwise, proceed to Item 3.

- a. Width of the receiving water at the outfall: N/A feet

- b. Are there oyster reefs in the vicinity of the discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the oyster reefs: [Click to enter text.](#)

- c. Are there sea grasses within the vicinity of the point of discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the grasses: [Click to enter text.](#)

Item 3. Classified Segment (Instructions, Page 80)

The discharge is/will be directly into (or within 300 feet of) a classified segment.

☐ Yes ☒ No

If **yes**, stop here and do not complete Items 4 and 5 of this worksheet or Worksheet 4.1.

If **no**, complete Items 4 and 5 and Worksheet 4.1 may be required.

Item 4. Description of Immediate Receiving Waters (Instructions, Page 80)

a. Name of the immediate receiving waters: Mudflats

b. Check the appropriate description of the immediate receiving waters:

☐ Lake or Pond

- Surface area (acres): Click to enter text.

- Average depth of the entire water body (feet): Click to enter text.

- Average depth of water body within a 500-foot radius of the discharge point (feet):
Click to enter text.

☐ Man-Made Channel or Ditch

☐ Stream or Creek

☐ Freshwater Swamp or Marsh

☐ Tidal Stream, Bayou, or Marsh

☐ Open Bay

☒ Other, specify:

If **Man-Made Channel or Ditch** or **Stream or Creek** were selected above, provide responses to Items 4.c – 4.g below:

c. For **existing discharges**, check the description below that best characterizes the area **upstream** of the discharge.

For **new discharges**, check the description below that best characterizes the area **downstream** of the discharge.

☒ Intermittent (dry for at least one week during most years)

☐ Intermittent with Perennial Pools (enduring pools containing habitat to maintain aquatic life uses)

☐ Perennial (normally flowing)

Check the source(s) of the information used to characterize the area upstream (existing discharge) or downstream (new discharge):

☐ USGS flow records

☒ personal observation

☐ historical observation by adjacent landowner(s)

☐ other, specify: Click to enter text.

d. List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point: Rio Grande River

e. The receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.).

☐ Yes

☒ No

If **yes**, describe how: [Click to enter text.](#)

- f. General observations of the water body during normal dry weather conditions: dry mudflats

Date and time of observation: year round

- g. The water body was influenced by stormwater runoff during observations.

☐ Yes ☒ No

If **yes**, describe how: [Click to enter text.](#)

Item 5. General Characteristics of Water Body (Instructions, Page 81)

- a. Is the receiving water upstream of the existing discharge or proposed discharge site influenced by any of the following (check all that apply):

☐ oil field activities	☒ urban runoff
☒ agricultural runoff	☐ septic tanks
☒ upstream discharges	☐ other, specify: Click to enter text.

- b. Uses of water body observed or evidence of such uses (check all that apply):

☐ livestock watering	☐ industrial water supply
☒ non-contact recreation	☐ irrigation withdrawal
☐ domestic water supply	☐ navigation
☐ contact recreation	☐ picnic/park activities
☐ fishing	☐ other, specify: Click to enter text.

- c. Description which best describes the aesthetics of the receiving water and the surrounding area (check only one):

☒ **Wilderness:** outstanding natural beauty; usually wooded or un-pastured area: water clarity exceptional

☐ **Natural Area:** trees or native vegetation common; some development evident (from fields, pastures, dwellings); water clarity discolored

☐ **Common Setting:** not offensive, developed but uncluttered; water may be colored or turbid

☐ **Offensive:** stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 4.1: WATERBODY PHYSICAL CHARACTERISTICS

The following information **is required** for new applications, EPA-designated Major facilities, and major amendment applications requesting to add an outfall if the receiving waters are perennial or intermittent with perennial pools (including impoundments) for a TDPS permit.

Complete the transects downstream of the existing or proposed discharges.

Item 1. Data Collection (Instructions, Page 82)

- a. Date of study: N/A Time of study: Click to enter text.
 Waterbody name: Click to enter text.
 General location: Click to enter text.
- b. Type of stream upstream of an existing discharge or downstream of a proposed discharge (check only one):
☐ perennial ☐ intermittent with perennial pools ☐ impoundment
- c. No. of defined stream bends:
 Well: Click to enter text. Moderately: Click to enter text. Poorly: Click to enter text.
- d. No. of riffles: Click to enter text.
- e. Evidence of flow fluctuations (check one):
☐ Minor ☐ Moderate ☐ Severe
- f. Provide the observed stream uses and where there is evidence of channel obstructions/modifications: Click to enter text.
- g. Complete the following table with information regarding the transect measurements.

Stream Transect Data

Transect Location	Habitat Type*	Water Surface Width (ft)	Stream Depths (ft)**								
N/A											

* riffle, run, glide, or pool
 ** channel bed to water surface

Item 2. Summarize Measurements (Instructions, Page 83)

Provide the following information regarding the transect measurements:

Streambed slope of entire reach (from USGS map in ft. /ft.): N/A

Approximate drainage area above the most downstream transect from USGS map or county highway map (square miles): N/A

Length of stream evaluated (ft): N/A

Number of lateral transects made: N/A

Average stream width (ft): N/A

Average stream depth (ft): N/A

Average stream velocity (ft/sec): N/A

Instantaneous stream flow (ft³/sec): N/A

Indicate flow measurement method (VERY IMPORTANT – type of meter, floating chip timed over a fixed distance, etc.): N/A

Flow fluctuations (i.e., minor, moderate, or severe): N/A

Size of pools (i.e., large, small, moderate, or none): N/A

Maximum pool depth (ft): N/A

Total number of stream bends: N/A

Number well defined: N/A

Number moderately defined: N/A

Number poorly defined: N/A

Total number of riffles: N/A

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 5.0: SEWAGE SLUDGE MANAGEMENT AND DISPOSAL

The following information **is required** for all TPDES permit applications that meet the conditions as outlined in Technical Report 1.0, Item 7.

Item 1. Sewage Sludge Solids Management Plan (Instructions, Page 84)

a. Is this a new permit application or an amendment permit application?

☐ Yes ☒ No

b. Does or will the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

If **yes** to either Item 1.a or 1.b, attach a solids management plan. **Attachment:** N/A

Item 2. Sewage Sludge Management and Disposal (Instructions, Page 84)

a. Check the box next to the sludge disposal method(s) authorized under the facility's existing permit (check all that apply).

- ☐ Permitted landfill
- ☐ Marketing and distribution by the permittee, attach Form TCEQ-00551
- ☐ Registered land application site, attach Form TCEQ-00565
- ☐ Processed by the permittee, attach Form TCEQ-00744
- ☐ Surface disposal site (sludge monofill), attach Form TCEQ-00744
- ☒ Transported to another WWTP
- ☐ Beneficial land application, attach Form TCEQ-10451
- ☐ Incineration, attach Form TCEQ-00744

Based on the selection(s) made above, complete and attach the required TCEQ forms as directed. Failure to submit the required TCEQ form will result in delays in processing the application

Attachment: Click to enter text.

b. Provide the following information for each disposal site:

Disposal site name: Starbase WWTP/Space Exploration Technologies (sludge hauler)

TCEQ Permit/Registration Number: 2#0000327/Sludge Id No. 26143

County where disposal site is located: Hidalgo

c. Method of sewage sludge transportation:

☒ truck ☐ train ☐ pipe ☐ other: [Click to enter text.](#)

TCEQ Hauler Registration Number: 26143

d. Sludge is transported as a:

☒ liquid ☒ semi-liquid ☐ semi-solid ☐ solid

e. Purpose of land application: ☐ reclamation ☐ soil conditioning ☒ N/A

f. If sewage sludge is transported to another WWTP for treatment, attach a written statement or copy of contractual agreements confirming that the WWTP identified above will accept and be responsible for the sludge from this facility for the life of the permit (at least 5 years).

Attachment: [Click to enter text.](#)

Item 3. Authorization for Sewage Sludge Disposal (Instructions, Page 85)

If this is a new or major amendment application which requests authorization of a new sewage sludge disposal method, check the new sewage disposal method(s) requested for authorization (check all that apply):

- ☐ Marketing and distribution by the permittee, attach Form TCEQ-00551
- ☐ Processed by the permittee, attach Form TCEQ-00744
- ☐ Surface disposal site (sludge monofill), attach Form TCEQ-00744
- ☐ Beneficial land application, attach Form TCEQ-10451
- ☐ Incineration, attach Form TCEQ-00744

Based on the selection(s) made above, complete and attach any required TCEQ forms, as directed. Failure to submit the required TCEQ form will result in delays in processing the application.

Attachment: N/A

NOTE: New authorization for beneficial land application, incineration, processing, or disposal in the TPDES permit or TLAP **requires a major amendment to the permit**. New authorization for composting may require a major amendment to the permit. See the instructions to determine if a major amendment is required or if authorization for composting can be added through the renewal process.

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

The following information is **required** for all applications for publicly-owned treatment works (POTWs).

For an explanation of the terms used in this worksheet, refer to the General Definitions on pages 4-12 and the Definitions Relating to Pretreatment on pages 13-14 of the Instructions.

Item 1. All POTWs (Instructions, Page 86)

- a. Complete the following table with the number of each type of industrial users (IUs) that discharge to the POTW and the daily average flows from each.

Industrial User Information

Type of Industrial User	Number of Industrial Users	Daily Average Flow (gallons per day)
CIU	N/A	
SIU - Non-categorical		
Other IU		

- b. In the past three years, has the POTW experienced treatment plant interference?

☐ Yes ☐ No

If **yes**, identify the date(s), duration, nature of interference, and probable cause(s) and possible source(s) of each interference event. Include the names of the IU(s) that may have caused the interference: [Click to enter text.](#)

- c. In the past three years, has the POTW experienced pass-through?

☐ Yes ☐ No

If **yes**, identify the date(s), duration, pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass-through event. Include the names of the IU(s) that may have caused the pass-through: [Click to enter text.](#)

- d. Does the POTW have, or is it required to develop, an approved pretreatment program?

☐ Yes ☐ No

If **yes**, answer all questions in Item 2 and skip Item 3.

If **no**, skip Item 2 and answer all questions in Item 3 for each SIU and CIU.

Item 2. POTWs With Approved Pretreatment Programs or Those Required To Develop A Pretreatment Program (Instructions, Page 86)

- a. Have there been any substantial modifications to the POTW's approved pretreatment program that have not been submitted to the Approval Authority (TCEQ) for approval according to 40 CFR § 403.18?

☐ Yes ☐ No

If **yes**, include an attachment which identifies all substantial modifications that have not been submitted to the TCEQ and the purpose of the modifications.

Attachment: [Click to enter text.](#)

- b. Have there been any non-substantial modifications to the POTW's approved pretreatment program that have not been submitted to the Approval Authority (TCEQ)?

☐ Yes ☐ No

If **yes**, include an attachment which identifies all non-substantial modifications that have not been submitted to the TCEQ and the purpose of the modification.

Attachment: [Click to enter text.](#)

- c. List all parameters measured above the MAL in the POTW's effluent monitoring during the last three years:

Effluent Parameters Measured Above the MAL

Pollutant	Concentration	MAL	Units	Date

Attachment: [Click to enter text.](#)

- d. Has any SIU, CIU, or other IU caused or contributed to any other problems (excluding interference or pass-through) at the POTW in the past three years?

☐ Yes ☐ No

If **yes**, provide a description of each episode, including date(s), duration, description of problems, and probable pollutants. Include the name(s) of the SIU(s)/CIU(s)/other IU(s) that may have caused or contributed to any of the problems: [Click to enter text.](#)

Item 3. Significant Industrial User and Categorical Industrial User Information (Instructions, Pages 88-87)

POTWs that **do not** have an approved pretreatment program **are required** to provide the following information for each SIU and CIU:

- a. Mr. or Ms.: [Click to enter text.](#) First/Last Name: [Click to enter text.](#)

Organization Name: [Click to enter text.](#)

SIC Code: [Click to enter text.](#)

Phone number: [Click to enter text.](#)

Email address: [Click to enter text.](#)

Physical Address: [Click to enter text.](#)

City/State/ZIP Code: [Click to enter text.](#)

Attachment: [Click to enter text.](#)

- b. Describe the industrial processes or other activities that affect or contribute to the SIU(s) or CIU(s) discharge (e.g., process and non-process wastewater): [Click to enter text.](#)

c. Provide a description of the principal products(s) or service(s) performed: [Click to enter text.](#)

d. Flow rate information

Flow Rate Information

Effluent Type	Discharge Day (gallons per day)	Discharge Frequency (Continuous, batch, or intermittent)
Process Wastewater		
Non-process Wastewater		

e. Pretreatment Standards

1. Is the SIU or CIU subject to technology-based local limits as defined in the application instructions?

☐ Yes ☐ No

2. Is the SIU subject to categorical pretreatment standards?

☐ Yes ☐ No

If **yes**, provide the category and subcategory or subcategories in the SIUs Subject To Categorical Pretreatment Standards table.

SIUs Subject to Categorical Pretreatment Standards

Category in 40 CFR	Subcategory in 40 CFR	Subcategory in 40 CFR	Subcategory in 40 CFR	Subcategory in 40 CFR

f. Has the SIU or CIU caused or contributed to any problem(s) (e.g., interferences, pass through, odors, corrosion, blockages) at the POTW in the past three years?

☐ Yes ☐ No

If **yes**, provide a description of each episode, including dates, duration, description of problems, and probable pollutants, and include the name(s) of the SIU(s)/CIU(s) that may have caused or contributed to the problem(s): [Click to enter text.](#)

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 7.0: STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES

This worksheet **is required** for all TPDES permit applications requesting individual permit coverage for discharges consisting of **either**: 1) solely of stormwater discharges associated with industrial activities, as defined in *40 CFR § 122.26(b)(14)(i-xi)*, **or** 2) stormwater discharges associated with industrial activities and any of the listed allowable non-stormwater discharges, as defined in the MSGP (TXR05000), Part II, Section A, Item 6.

Discharges of stormwater as defined in *40 CFR § 122.26 (b)(13)* are not required to obtain authorization under a TPDES permit (see exceptions at *40 CFR §§ 122.26(a)(1)* and *(9)*). Authorization for discharge may be required from a local municipal separate storm sewer system.

Item 1. Applicability (Instructions, Page 89)

Do discharges from any of the existing/proposed outfalls consist either 1) solely of stormwater discharges associated with industrial activities **or** 2) stormwater discharges associated with industrial activities and any of the allowable non-stormwater discharges?

☒ Yes ☐ No

If **no**, stop here. If **yes**, proceed as directed.

Item 2. Stormwater Coverage (Instructions, Page 89)

List each existing/proposed stormwater outfall at the facility and indicate which type of authorization covers or is proposed to cover discharges.

Authorization Coverage

Outfall	Authorization under MSGP	Authorized Under Individual Permit
004	☒ Current	☒ Proposed
012	☒ Current	☒ Proposed
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐

If **all** existing/proposed outfalls which discharge stormwater associated with industrial activities (and any of the allowable non-stormwater discharges) are **authorized under the MSGP**, **stop** here.

If **seeking authorization** for any outfalls which discharge stormwater associated with industrial activities (and any of the allowable non-stormwater discharges) **under an individual permit**, **proceed**.

NOTE: The following information is required for each existing/proposed stormwater outfall for which the facility is seeking individual permit authorization under this application

Item 3. Site Map (Instructions, Page 90)

Attach a site map or maps (drawn to scale) of the entire facility with the following information.

- the location of each stormwater outfall to be covered by the permit
- an outline of the drainage area that is within the facility's boundary and that contributes stormwater to each outfall to be covered by the permit
- connections or discharge points to municipal separate storm sewer systems
- locations of all structures (e.g. buildings, garages, storage tanks)
- structural control devices that are designed to reduce pollution in discharges of stormwater associated with industrial activities
- process wastewater treatment units (including ponds)
- bag house and other air treatment units exposed to stormwater (stormwater runoff, snow melt runoff, and surface runoff and drainage)
- landfills; scrapyards; surface water bodies (including wetlands)
- vehicle and equipment maintenance areas
- physical features of the site that may influence discharges of stormwater associated with industrial activities or contribute a dry weather flow
- locations where spills or leaks of reportable quality (as defined in *30 TAC § 327.4*) have occurred during the three years before this application was submitted to obtain coverage under an individual permit
- processing areas, storage areas, material loading/unloading areas, and other locations where significant materials are exposed to stormwater (stormwater runoff, snow melt runoff, and surface runoff and drainage)

☒ Check the box to confirm all above information was provided on the facility site map(s).

Attachment: E Site Map

Item 4. Facility/Site Information (Instructions, Page 90)

- a. Provide the area of impervious surface and the total area drained by each stormwater outfall requested for authorization by this permit application.

Impervious Surfaces

Outfall	Area of Impervious Surface (include units)	Total Area Drained (include units)
001	7,500 sq ft	7,500 sq ft
002	7,500 sq ft	7,500 sq ft

- b. Provide the following local area rainfall information and the source of the information.
Wettest month: September
Average rainfall for wettest month (total inches): 7 inches
25-year, 24-hour rainfall (inches): 9.04
Source: NOAA
- c. Attach an inventory, or list, of materials currently handled at the facility that may be exposed to precipitation. **Attachment:** F Materials List
- d. Attach narrative descriptions of the industrial processes and activities involving the materials in the above-listed inventory that occur outdoors or in some manner that may result in exposure of the materials to precipitation or runoff (see instructions for guidance). **Attachment:** F Materials List
- e. Describe any BMPs and controls the facility uses/proposes to prevent or effectively reduce pollution in stormwater discharges from the facility: Velocity and sediment controls

Item 5. Pollutant Analysis (Instructions, Page 91)

- a. Provide the date range of all sampling events conducted to obtain the analytical data submitted with this application (e.g., 05/01/2018-05/30/2018): 11/01/2023-12/31/2023
- b. ☒ Check the box to confirm all samples were collected no more than 12 months prior to the date of application submittal.
- c. Complete Table 17 as directed on page 92 of the Instructions.

Table 17 for Outfall No.: 001

Pollutant	Grab Sample* Maximum (mg/L)	Composite Sample** Maximum (mg/L)	Grab Sample* Average (mg/L)	Composite Sample** Average (mg/L)	Number of Storm Events Sampled	MAL (mg/L)
pH (standard units)	NA	—	(min)	—		—
Total suspended solids	NA					—
Chemical oxygen demand	NA					—
Total organic carbon	NA					—
Oil and grease	NA					—
Arsenic, total	0.0107					0.0005
Barium, total	0.102					0.003
Cadmium, total	0.00241					0.001
Chromium, total	0.0613					0.003
Chromium, trivalent	NA					—
Chromium, hexavalent	NA					0.003
Copper, total	0.0101					0.002

Pollutant	Grab Sample* Maximum (mg/L)	Composite Sample** Maximum (mg/L)	Grab Sample* Average (mg/L)	Composite Sample** Average (mg/L)	Number of Storm Events Sampled	MAL (mg/L)
Lead, total	0.00308					0.0005
Mercury, total	<0.113					0.000005
Nickel, total	0.00599					0.002
Selenium, total	0.00298					0.005
Silver, total	<0.0000628					0.0005
Zinc, total	0.0574					0.005

* Taken during first 30 minutes of storm event

** Flow-weighted composite sample

d. Complete Table 18 as directed on pages 92-94 of the Instructions.

Table 18 for Outfall No.: N/A

Pollutant	Grab Sample* Maximum (mg/L)	Composite Sample** Maximum (mg/L)	Grab Sample* Average (mg/L)	Composite Sample** Average (mg/L)	Number of Storm Events Sampled

* Taken during first 30 minutes of storm event

** Flow-weighted composite sample

Attachment: [Click to enter text.](#)

Item 6. Storm Event Data (Instructions, Page 93)

Provide the following data for the storm event(s) which resulted in the maximum values for the analytical data submitted:

Date of storm event: 12/14/2023

Duration of storm event (minutes): approximately 1 hr

Total rainfall during storm event (inches): 0.04 in

Number of hours the between beginning of the storm measured and the end of the previous measurable storm event (hours): >72 hrs

Maximum flow rate during rain event (gallons/minute): Variable

Total stormwater flow from rain event (gallons): Variable

Provide a description of the method of flow measurement or estimate:

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 8.0: AQUACULTURE

This worksheet **is required** for all TPDES permit applications requesting individual permit coverage for discharges of aquaculture wastewater.

Item 1. Facility/Site Information (Instructions, Page 94)

- a. Complete the following table with information regarding production ponds, raceways, and fabricated tanks at the facility.

Production Pond Descriptions

Number of Ponds	Dimensions (include units)	Area of Each Pond (include units)	Number of Ponds x Area of Ponds (include Units)
N/A			

Total surface area of all ponds: [Click to enter text.](#)

Raceway Descriptions

Number of Raceways	Dimensions (include units)

Fabricated Tank Descriptions

Number of Tanks	Dimensions (include units)

b. Does the facility have a TPWD-approved emergency plan?

☐ Yes ☐ No

If **yes**, attach a copy of the approved plan.

Attachment: [Click to enter text.](#)

c. Does the facility have an aquatic plant transplant authorization?

☐ Yes ☐ No

If **yes**, attach a copy of the authorization letter.

Attachment: [Click to enter text.](#)

d. Provide the number of aquaculture facilities located within 25-miles of this facility: [Click to enter text.](#)

Item 2. Species Identification (Instructions, Page 95)

Complete the following table regarding each species raised, source, origin, and disease status of the stock. Identify and attach copies of any current relevant authorizations or permits that authorize the species.

Stock Species Information

Species	Source of Stock	Origin of Stock	Disease Status	Authorizations

Attachment: [Click to enter text.](#)

Item 3. Stock Management Plan (Instructions, Page 95)

Attach a detailed stock management plan: [Click to enter text.](#)

Item 4. Water Treatment and Discharge Description (Instructions, Page 96)

Attach a detailed description of the discharge practices and water treatment process(es): [Click to enter text.](#)

Item 5. Solid Waste Management (Instructions, Page 96)

Attach a description of the solid waste-disposal practices: [Click to enter text.](#)

Item 6. Site Assessment Report (Instructions, Page 96)

All new and expanding commercial shrimp facilities located/to be located within the coastal zone must attach a detailed site assessment report which identifies sensitive aquatic habitats within the coastal zone: [Click to enter text.](#)

WORKSHEET 9.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CLASS V INJECTION WELL INVENTORY/AUTHORIZATION FORM

Submit the completed form to:

TCEQ
IUC Permits Team
Radioactive Materials Division
MC-233
PO Box 13087
Austin, Texas 78711-3087
512-239-6466

For TCEQ Use Only

Reg. No. _____

Date Received _____

Date Authorized _____

Item 1. General Information (Instructions Page 99)

1. TCEQ Program Area

Program Area (PST, VCP, IHW, etc.): [Click to enter text.](#)

Program ID: [Click to enter text.](#)

Contact Name: [Click to enter text.](#)

Phone Number: [Click to enter text.](#)

2. Agent/Consultant Contact Information

Contact Name: [Click to enter text.](#)

Address: [Click to enter text.](#)

City, State, and Zip Code: [Click to enter text.](#)

Phone Number: [Click to enter text.](#)

3. Owner/Operator Contact Information

☐ Owner ☐ Operator

Owner/Operator Name: [Click to enter text.](#)

Contact Name: [Click to enter text.](#)

Address: [Click to enter text.](#)

City, State, and Zip Code: [Click to enter text.](#)

Phone Number: [Click to enter text.](#)

4. Facility Contact Information

Facility Name: [Click to enter text.](#)

Address: [Click to enter text.](#)

City, State, and Zip Code: [Click to enter text.](#)

Location description (if no address is available): [Click to enter text.](#)

Facility Contact Person: [Click to enter text.](#)

Phone Number: [Click to enter text.](#)

5. Latitude and Longitude, in degrees-minutes-seconds

Latitude: [Click to enter text.](#)

Longitude: [Click to enter text.](#)

Method of determination (GPS, TOPO, etc.): [Click to enter text.](#)

Attach topographic quadrangle map as attachment A.

6. Well Information

Type of Well Construction, select one:

- ☐ Vertical Injection
- ☐ Subsurface Fluid Distribution System
- ☐ Infiltration Gallery
- ☐ Temporary Injection Points
- ☐ Other, Specify: [Click to enter text.](#)

Number of Injection Wells: [Click to enter text.](#)

7. Purpose

Detailed Description regarding purpose of Injection System:

[Click to enter text.](#)

Attach a Site Map as Attachment B (Attach the Approved Remediation Plan, if appropriate.)

8. Water Well Driller/Installer

Water Well Driller/Installer Name: [Click to enter text.](#)

City, State, and Zip Code: [Click to enter text.](#)

Phone Number: [Click to enter text.](#)

License Number: [Click to enter text.](#)

Item 2. Proposed Down Hole Design

Attach a diagram signed and sealed by a licensed engineer as Attachment C.

Down Hole Design Table

Name of String	Size	Setting Depth	Sacks Cement/Grout – Slurry Volume – Top of Center	Hole Size	Weight (lbs/ft) PVC/Steel
Casing					
Tubing					
Screen					

Item 3. Proposed Trench System, Subsurface Fluid Distribution System, or Infiltration Gallery

Attach a diagram signed and sealed by a licensed engineer as Attachment D.

System(s) Dimensions: [Click to enter text.](#)

System(s) Construction: [Click to enter text.](#)

Item 4. Site Hydrogeological and Injection Zone Data

1. Name of Contaminated Aquifer: [Click to enter text.](#)

2. Receiving Formation Name of Injection Zone: [Click to enter text.](#)

3. Well/Trench Total Depth: [Click to enter text.](#)

4. Surface Elevation: [Click to enter text.](#)

5. Depth to Ground Water: [Click to enter text.](#)

6. Injection Zone Depth: [Click to enter text.](#)

7. Injection Zone vertically isolated geologically? ☐ Yes ☐ No

Impervious Strata between Injection Zone and nearest Underground Source of Drinking Water:

Name: [Click to enter text.](#)

Thickness: [Click to enter text.](#)

8. Attach a list of contaminants and the levels (ppm) in contaminated aquifer as Attachment E.

9. Attach the Horizontal and Vertical extent of contamination and injection plume as Attachment F.

10. Attach Formation (Injection Zone) Water Chemistry (Background levels) TDS, etc., as Attachment G.

11. Injection Fluid Chemistry in PPM at point of injection. Attach as Attachment H.

12. Lowest Known Depth of Ground Water with < 10,000 PPM TDS: [Click to enter text.](#)

13. Maximum injection Rate/Volume/Pressure: [Click to enter text.](#)

14. Water wells within 1/4 mile radius (attach map as Attachment I): [Click to enter text.](#)

15. Injection wells within 1/4 mile radius (attach map as Attachment J): [Click to enter text.](#)

16. Monitor wells within 1/4 mile radius (attach drillers logs and map as Attachment K): [Click to enter text.](#)

17. Sampling frequency: [Click to enter text.](#)

18. Known hazardous components in injection fluid: [Click to enter text.](#)

Item 5. Site History

1. Type of Facility: [Click to enter text.](#)
2. Contamination Dates: [Click to enter text.](#)
3. Original Contamination (VOCs, TPH, BTEX, etc.) and Concentrations. Attach as Attachment L.
4. Previous Remediation. Attach results of any previous remediation as Attachment M.

NOTE: Authorization Form should be completed in detail and authorization given by the TCEQ before construction, operation, and/or conversion can begin. Attach additional pages as necessary.

Item 6. CLASS V INJECTION WELL DESIGNATIONS

- 5A07 Heat Pump/AC return (IW used for groundwater to heat or cool buildings)
- 5A19 Industrial Cooling Water Return Flow (IW used to cool industrial process equipment)
- 5B22 Salt Water Intrusion Barrier (IW used to inject fluids to prevent the intrusion of salt water into an aquifer)
- 5D02 Stormwater Drainage (IW designed for the disposal of rain water)
- 5D04 Industrial Stormwater Drainage Wells (IW designed for the disposal of rain water associated with industrial facilities)
- 5F01 Agricultural Drainage (IW that receive agricultural runoff)
- 5R21 Aquifer Recharge (IW used to inject fluids to recharge an aquifer)
- 5S23 Subsidence Control Wells (IW used to control land subsidence caused by groundwater withdrawal)
- 5W09 Untreated Sewage
- 5W10 Large Capacity Cesspools (Cesspools that are designed for 5,000 gpd or greater)
- 5W11 Large Capacity Septic systems (Septic systems designed for 5,000 gpd or greater)
- 5W12 WTPP disposal
- 5W20 Industrial Process Waste-disposal Wells
- 5W31 Septic System (Well Disposal method)
- 5W32 Septic System Drainfield Disposal
- 5X13 Mine Backfill (IW used to control subsidence, dispose of mining byproducts, or fill sections of a mine)
- 5X25 Experimental Wells (Pilot Test) (IW used to test new technologies or tracer dye studies)
- 5X26 Aquifer Remediation (IW used to clean up, treat, or prevent contamination of a USDW)
- 5X27 Other Wells
- 5X28 Motor Vehicle Waste-disposal Wells (IW used to dispose of waste from a motor vehicle site - These are currently banned)
- 5X29 Abandoned Drinking Water Wells (waste disposal)

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 10.0: QUARRIES IN THE JOHN GRAVES SCENIC RIVERWAY

This worksheet **is required** for all applications for individual permits for a municipal solid waste facility or mining facility located within a Water Quality Protection Area in the John Graves Scenic Riverway. **Note: Review 30 TAC §§ 311.71-311.82 thoroughly prior to completing any portion of this worksheet.**

Item 1. Exclusions (Instructions, Page 100)

- a. Is this a municipal solid waste facility?
☐ Yes ☐ No
- b. Has this quarry been in operation since January 1, 1994 without cessation of operation for more than 30 consecutive days and under the same ownership?
☐ Yes ☐ No
- c. Is this a coal mine?
☐ Yes ☐ No
- d. Is this facility mining clay and/or shale for use in manufacturing structural clay products?
☐ Yes ☐ No

If **yes** to **any** above question, **stop here**. The facility is required to maintain documentation, as outlined in 30 TAC § 311.72(c), at the facility to demonstrate the exclusion(s).

Item 2. Location of the Quarry (Instructions, Page 101)

Check the box next to the distance between the quarry and the nearest navigable water body:

- ☐ < 200 feet ☐ 200 feet – 1,500 feet ☐ 1,500 feet – 1 mile ☐ > 1 mile

NOTE: The construction or operation of any new quarry or expansion of any existing quarry **is prohibited** within 200 feet of any water body located within a Water Quality Protection Area in the John Graves Scenic Riverway.

Item 3. Additional Requirements (Instructions, Page 101)

Use the table in the Instructions to determine if additional application requirements apply to the facility based on distance between the quarry and the nearest waterway. Attach as appropriate or enter N/A.

- a. Attach a Restoration Plan: [Click to enter text.](#)
- b. Amount of Financial Assurance for Restoration: \$ [Click to enter text.](#)
Mechanism: [Click to enter text.](#)
- c. Attach a Technical Demonstration: [Click to enter text.](#)
- d. Attach a Reclamation Plan: [Click to enter text.](#)
- e. Amount of Financial Assurance for Reclamation: \$ [Click to enter text.](#)
Mechanism: [Click to enter text.](#)

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 11.0: COOLING WATER SYSTEM INFORMATION

This worksheet is **required** for all TPDES permit applications that meet the conditions outlined in Technical Report 1.0, Item 12.

Item 1. Cooling Water System Data (Instructions, Page 104)

a. Complete the following table with information regarding the cooling water system.

Cooling Water System Data

Parameter	Volume (include units)
Total DIF	
Total AIF	
Intake Flow Use(s) (%)	
Contact cooling	
Non-contact cooling	
Process Wastewater	
Other	

b. Attach the following information:

1. A narrative description of the design and annual operation of the facility's cooling water system and its relationship to the CWIS(s).
2. A scaled map depicting the location of each CWIS, impoundment, intake pipe, and canals, pipes, or waterways used to convey cooling water to, or within, the cooling water system. Provide the latitude and longitude for each CWIS and any intake pipe(s) on the map. Indicate the position of the intake pipe within the water column.
3. A description of water reuse activities, if applicable, reductions in total water withdrawals, if applicable, and the proportion of the source waterbody withdrawn (on a monthly basis).
4. Design and engineering calculations prepared by a qualified professional and data to support the information provided in above item a.
5. Previous year (a minimum of 12 months) of AIF data.
6. A narrative description of existing or proposed impingement and entrainment technologies or operation measures and a summary of their performance, including, but not limited to, reductions in impingement mortality and entrainment due to intake location and reductions in total water withdrawals and usage.

Attachment: [Click to enter text.](#)

Item 2. Cooling Water Intake Structure(s) Data (Instructions, Page 105)

- a. Complete the following table with information regarding each cooling water intake structure (this includes primary and make-up CWIS(s)).

Cooling Water Intake Structure(s) Data

CWIS ID				
DIF (include units)				
AIF (include units)				
Intake Flow Use(s) (%)				
Contact cooling				
Non-contact cooling				
Process Wastewater				
Other				
Latitude (decimal degrees)				
Longitude (decimal degrees)				

- b. Attach the following information regarding the CWIS(s):
1. A narrative description of the configuration of each CWIS, annual and daily operation, including any seasonal changes, and where it is located in the water body and in the water column.
 2. Engineering calculations for each CWIS.

Attachment: [Click to enter text.](#)

Item 3. Source Water Physical Data (Instructions, Page 105)

- a. Complete the following table with information regarding the CWIS(s) source waterbody (this includes primary and make-up CWIS(s)).

Source Waterbody Data

CWIS ID				
Source Waterbody				
Mean Annual Flow				
Source				

- b. Attach the following information regarding the source waterbody.
1. A narrative description of the source water for each CWIS, including areal dimensions, depths, salinity and temperature regimes, and other documentation that supports this determination of the water body type where each cooling water intake structure is located.

2. A narrative description of the source waterbody's hydrological and geomorphological features.
3. Scaled drawings showing the physical configuration of all source water bodies used by the facility, including the source waterbody's hydrological and geomorphological features. **NOTE:** The source waterbody's hydrological and geomorphological features may be included on the map submitted for item 1.b.ii of this worksheet.
4. A description of the methods used to conduct any physical studies to determine the intake's area of influence within the waterbody and the results of such studies.

Attachment: [Click to enter text.](#)

Item 4. Operational Status (Instructions, Page 106)

- a. Is this application for a power production or steam generation facility?

☐ Yes ☐ No

If **no**, proceed to Item 4.b. If **yes**, provide the following information as an attachment:

1. Describe the operating status of each individual unit, including age, capacity utilization rate (or equivalent) for the previous five years (a minimum of 60 months), and any seasonal changes in operation.
2. Describe any extended or unusual outages or other factors which significantly affect current data for flow, impingement, entrainment.
3. Identify any operating unit with a capacity utilization rate of less than 8 percent averaged over a contiguous period of two years (a minimum of 24 months).
4. Describe any major upgrades completed within the last 15 years, including but not limited to boiler replacement, condenser replacement, turbine replacement, or changes of fuel type.

Attachment: [Click to enter text.](#)

- b. Process Units

1. Is this application for a facility which has process units that use cooling water (other than for power production or steam generation)?

☐ Yes ☐ No

If **no**, proceed to Item 4.c. If **yes**, continue.

2. Does the facility use or intend to use reductions in flow or changes in operations to meet the requirements of *40 CFR § 125.94(c)*?

☐ Yes ☐ No

If **no**, proceed to Item 4.c. If **yes**, attach descriptions of the following information:

- Individual production processes and product lines
- The operating status, including age of each line and seasonal operation
- Any extended or unusual outages that significantly affect current data for flow, impingement, entrainment, or other factors

- Any major upgrades completed within the last 15 years and plans or schedules for decommissioning or replacement of process units or production processes and product lines.

Attachment: [Click to enter text.](#)

c. Is this an application for a nuclear power production facility?

☐ Yes ☐ No

If **no**, proceed to Item 4.d. If **yes**, attach a description of completed, approved, or scheduled upgrades and the Nuclear Regulatory Commission relicensing status for each unit at the facility.

Attachment: [Click to enter text.](#)

d. Is this an application for a manufacturing facility?

☐ Yes ☐ No

If **no**, proceed to Worksheet 11.1. If **yes**, attach descriptions of current and future production schedules and any plans or schedules for any new units planned within the next five years (a minimum of 60 mos)

Attachment: [Click to enter text.](#)

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 11.1: IMPINGEMENT MORTALITY

This worksheet is **required** for all TPDES permit applications that **meet the conditions outlined in Technical Report 1.0, Item 12**. Complete one copy of this worksheet for **each** individual CWIS the facility uses or proposes to use.

CWIS ID: [Click to enter text.](#)

Item 1. Impingement Compliance Technology Selection (Instructions, Page 107)

Check the box next to the method of compliance for the Impingement Mortality Standard selected by the facility.

- ☐ Closed-cycle recirculating system(CCRS) [40 CFR § 125.94(c)(1)]
- ☐ 0.5 ft/s Through-Screen Design Velocity [40 CFR § 125.94(c)(2)] – Proceed to Worksheet 11.2
- ☐ 0.5 ft/s Through Screen Actual Velocity [40 CFR § 125.94(c)(3)]
- ☐ Existing offshore velocity cap [40 CFR § 125.94(c)(4)] – Proceed to Worksheet 11.2
- ☐ Modified traveling screens [40 CFR § 125.94(c)(5)]
- ☐ System of technologies [40 CFR § 125.94(c)(6)]
- ☐ Impingement mortality performance standard [40 CFR § 125.94(c)(7)]
- ☐ De minimis rate of impingement [40 CFR § 125.94(c)(11)]
- ☐ Low capacity utilization power-generation facilities [40 CFR § 125.94(c)(12)]

If 0.5 ft/s Through-Screen Design Velocity [40 CFR § 125.94(c)(2)] or existing offshore velocity cap [40 CFR § 125.94(c)(4)] was selected, proceed to Worksheet 11.2. Otherwise, continue to Item 2.

Item 2. Impingement Compliance Technology Information (Instructions, Page 107)

Complete the following sections based on the selection made for item 1 above.

a. CCRS [40 CFR § 125.94(c)(1)]

- ☐ Check this box to confirm the CWS meets the definition of CCRS located at 40 CFR § 125.91(c) and provide a response to the following questions.

1. Does the facility use or propose to use a CWIS to replenish water losses to the CWS?

- ☐ Yes ☐ No

If **no**, proceed to item a.2. If **yes**, provide the following information as an attachment and continue.

- CWIS ID
- 12 months of intake flow data for any CWIS used for make-up intake flows to replenish cooling water losses, excluding intakes for losses due to blowdown, drift, or evaporation.

- A narrative description of any physical or operational measures taken to minimize make-up withdraws.

Attachment: [Click to enter text.](#)

NOTE: Do not complete a separate Worksheet 11.1 for a make-up CWIS.

2. Does the facility use or propose to use cooling towers?

☐ Yes ☐ No

If **no**, proceed to Worksheet 11.2. If **yes**, provide the following information and proceed to Worksheet 11.2.

- Average number of cycles of concentration (COCs) prior to blowdown:

Average COCs Prior to Blowdown

Cooling Tower ID				
COCs				

- Attach COC monitoring data for each cooling tower from the previous year (a minimum of 12 months): [Click to enter text.](#)
- Maximum number of COCs each cooling tower can accomplish based on design of the system.

Calculated COCs Prior to Blowdown

Cooling Tower ID				
COCs				

- Describe conditions that may limit the number of COCs prior to blowdown, if any, including but not limited to permit conditions: [Click to enter text.](#)

b. 0.5 ft/s Through Screen Actual Velocity [40 CFR § 125.94(c)(3)]

Provide daily intake flow measurement monitoring data from the previous year (a minimum of 12 months) as an attachment and proceed to Worksheet 11.2.

Attachment: [Click to enter text.](#)

c. Modified traveling screens [40 CFR § 125.94(c)(5)]

Provide the following information as an attachment and proceed to Worksheet 11.2.

1. A description of the modified traveling screens and associated equipment.
2. A site-specific impingement technology performance optimization study that includes a narrative description of the biological data collection methods
3. Biological sampling data from the previous two years (a minimum of 24 months).

Attachment: [Click to enter text.](#)

d. System of technologies [40 CFR § 125.94(c)(6)] or impingement mortality performance standard [40 CFR § 125.94(c)(7)]

Provide the following information as an attachment and proceed to Worksheet 11.2.

1. A description of the system of technologies used or proposed for use by the facility to

achieve compliance with the impingement mortality standard.

2. A site-specific impingement technology performance optimization study that includes a narrative description of the biological data collection methods.
3. Biological sampling data from the previous two years (a minimum of 24 months).

Attachment: [Click to enter text.](#)

- e. De minimis rate of impingement [*40 CFR § 125.94(c)(11)*]

Provide the following information and proceed to Worksheet 11.2.

1. Attach monitoring data from the previous year (a minimum of 12 months) of intake flow measured at a frequency of 1/day on days of operation.

Attachment: [Click to enter text.](#)

2. If the rate of impingement caused by the CWIS is extremely low (at an organism or age-one equivalent count), attach supplemental information to Worksheet 11.0, item 1.b.6. to support this determination.

Attachment: [Click to enter text.](#)

- f. Low capacity utilization power-generation facilities [*40 CFR § 125.94(c)(12)*]

Attach monthly utilization data from the previous 2 years (a minimum of 24 months) for each operating unit and proceed to Worksheet 11.2.

Attachment: [Click to enter text.](#)

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 11.2: SOURCE WATER BIOLOGICAL DATA

This worksheet is **required** for all TPDES permit applications that **meet the conditions outlined in Technical Report 1.0, Item 12**. Complete one copy of this worksheet for **each** source waterbody of a CWIS for which a facility has selected an Impingement Mortality Technology Option described at *40 CFR §§ 125.94(c)(1)-(7)*.

Name of source waterbody: [Click to enter text.](#)

Item 1. Species Management (Instructions, Page 109)

- a. The facility has obtained an incidental take permit for its cooling water intake structure(s) from the USFWS or the NMFS.

☐ Yes ☐ No

If yes, attach any information submitted in order to obtain that permit, which may be used to supplement the permit application information requirements of paragraph *40 CFR § 125.95(f)*.

Attachment: [Click to enter text.](#)

- b. Is the facility requesting a waiver from application requirements at *40 CFR § 122.21(r)(4)* in accordance with *40 CFR § 125.95* for any CWIS(s) that withdraw from a man-made reservoir that is stocked and managed by a state or federal natural resources agency or the equivalent?

☐ Yes ☐ No

If **yes**, attach a copy of the most recent managed fisheries report to TPWD, or equivalent.

Attachment: [Click to enter text.](#)

- c. There are no federally listed threatened or endangered species or critical habitat designations within the source water body.

☐ True ☐ False

Item 2. Source Water Biological Data (Instructions, Page 109)

New Facilities (Phase I, Track I and II)

- Provide responses to all items in this section and stop.

Existing Facilities (Phase II)

- If the answer to **1.b.** above was **no**, provide responses to all items in this section and proceed to Worksheet 11.3.
- If the answer to **1.b.** was **yes** and **1.c.** was **true**, do not complete any items in this section and proceed to Worksheet 11.3.
- If the answer to **1.b.** was **yes** and **1.c.** was **false**, attach a response for any item in this section that is not contained within the most recent TPWD, or equivalent and proceed to Worksheet 11.3.

Attachment: [Click to enter text.](#)

- a. A list of the data requested at *40 CFR § 122.21(r)(4)(ii)* through (vi) that are not available, and efforts made to identify sources of the data.
- b. Provide a list of species (or relevant taxa) in the vicinity of the CWIS and identify the following information regarding each species listed.
 - all life stages and their relative abundance,
 - identification of all species and life stages that would be most susceptible to impingement and entrainment,
 - forage base,
 - significance to commercial fisheries,
 - significance to recreational fisheries,
 - primary period of reproduction,
 - larval recruitment, and
 - period of peak abundance for relevant taxa.
- c. Data representative of the seasonal and daily activities (e.g., feeding and water column migration) of biological organisms in the vicinity of the CWIS(s).
- d. Identify all threatened, endangered, and other protected species that might be susceptible to impingement and entrainment at the CWIS(s).
- e. Documentation of any public participation or consultation with federal or state agencies undertaken.

The following is required for existing facilities only. Include the following information with the above listed attachment.

- f. Identify any protective measures and stabilization activities that have been implemented and provide a description of how these measures and activities affected the baseline water condition in the vicinity of the intake.
- g. A list of fragile species, as defined at *40 CFR § 125.92(m)*, at the facility. The applicant need only identify those species not already identified as fragile at *40 CFR § 125.92(m)*.

NOTE: New units at an existing facility are not required to resubmit this information if the cooling water withdrawals for the operation of the new unit are from an existing intake.

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 11.3: ENTRAINMENT

This worksheet is **required** for all TPDES permit applications that **meet the conditions outlined in Technical Report 1.0, Item 12**. Complete one copy of this worksheet for **each** individual CWIS the facility uses or proposes to use.

CWIS ID: [Click to enter text.](#)

Item 1. Applicability (Instructions, Page 111)

Is the AIF of the CWIS identified above greater than, or equal to, 125 MGD?

☐ Yes ☐ No

- If **no** or the facility has selected **CCRS** [40 CFR § 125.94(c)(1)] for the impingement mortality compliance method, complete Item 2 and stop here.
- If **yes** and the facility is **seeking a waiver** from application requirements in accordance with 40 CFR § 125.95 for any CWIS(s) that withdraw from a man-made reservoir that is stocked and managed by a state or federal natural resources agency or the equivalent, complete item 2 and stop.
- If **yes** and the facility is **not seeking a waiver** from application requirements in accordance with 40 CFR § 125.95, complete item 2 and provide any required and completed studies listed in item 3. For any required studies in item 3 that are not complete, provide a detailed explanation for the delay and an anticipated schedule for completion and submittal.

Item 2. Existing Entrainment Performance Studies (Instructions, Page 111)

Attach any previously conducted studies or studies obtained from other facilities addressing technology efficacy, through-facility entrainment survival, and other entrainment studies.

Attachment: [Click to enter text.](#)

Item 3. Facility Entrainment Performance Studies (Instructions, Page 111)

- Attach an entrainment characterization study, as described at 40 CFR § 122.21(r)(9): [Click to enter text.](#)
- Attach a comprehensive feasibility study, as described as 40 CFR § 122.21(r)(10): [Click to enter text.](#)
- Attach a benefits valuation study, as described as 40 CFR § 122.21(r)(11): [Click to enter text.](#)
- Attach a non-water quality environmental and other impacts study, as described as 40 CFR § 122.21(r)(12): [Click to enter text.](#)
- Attach a peer review analysis, as described as 40 CFR § 122.21(r)(13): [Click to enter text.](#)

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 12.0: OIL AND GAS EXPLORATION, DEVELOPMENT, AND PRODUCTION WASTEWATER DISCHARGES

This worksheet **is required** for all TPDES permit applications that are subject to Effluent Limitation Guidelines in 40 CFR Part 435.

Item 1. Operational Information (Instructions, Page 112)

- a. Is the wastewater from an oil and gas exploration, development, or production facility located west of the 98th meridian?

☐ Yes ☐ No

If yes, continue to the next question. If no, skip to Item 2 relating to Production/Process Data.

- b. Provide justification for how the wastewater is/will be used for agriculture or wildlife propagation.

Click to enter text.

Item 2. Production/Process Data (Instructions, Page 112)

- a. Provide the applicable 40 CFR Part 435 Subpart(s).

Click to enter text.

- b. Describe if the permit being sought is for discharges from exploration, development, production, or for a combination of more than one of those activities.

Click to enter text.

c. Provide information on all waste-streams generated and specify which waste-streams you are requesting to be authorized for discharge.

Wastestreams Generated

Wastestream	Requesting authorization to discharge? (Yes/No)	Volume (MGD)	% of Total Flow

d. Describe how the facility will manage wastestreams for which discharge authorization is not being sought.

Click to enter text.

Attachment: Click to enter text.

e. Provide information on miscellaneous discharges.

Click to enter text.

Attachment: Click to enter text.

- f. List of chemicals that are in use, or will be used, downhole. Provide the category, concentration used/to be used, and purpose of using the chemical. Attach a safety data sheet for each chemical listed.

Chemicals List

Category	Chemical Name	Concentration (include units)	Purpose

Attachment: [Click to enter text.](#)

- g. List of chemicals that are in use, or will be used, to treat the wastewater to be discharged under this authorization. Provide the concentration used/to be used and purpose of using the chemical. Attach a safety data sheet for each chemical listed.

Water Treatment Chemicals List

Category	Chemical Name	Concentration (include units)	Purpose

Attachment: [Click to enter text.](#)

Item 3. Pollutant Analysis (Instructions, Page 113)

Tables 1, 2, 6, and 7 located in Worksheet 2.0 are required. In addition, Table 19 below is required and must be completed for each outfall and submitted with this application. The remaining tables in Worksheet 2.0, are required as applicable.

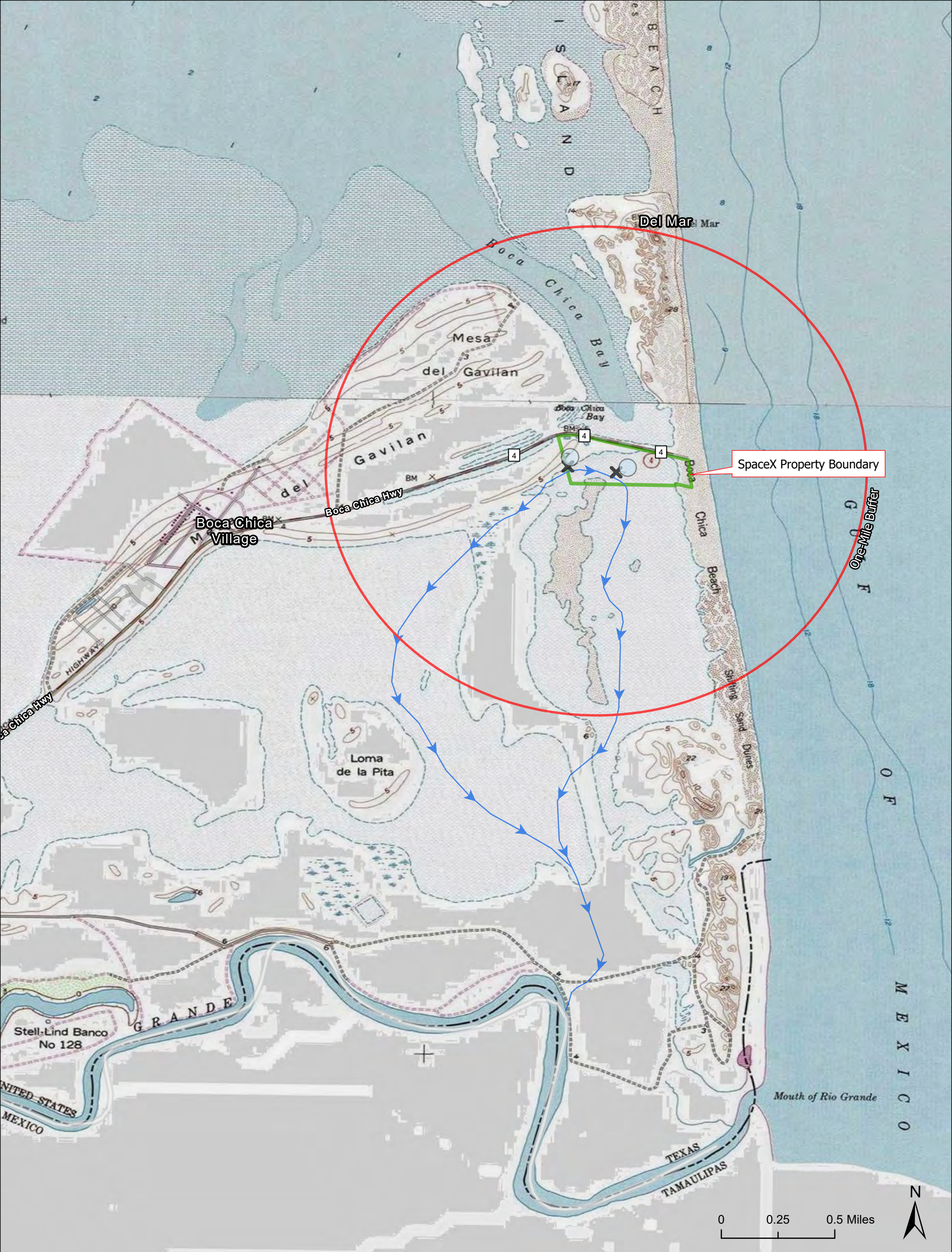
- a. Provide the date range of all sampling events conducted to obtain the analytical data submitted with this application (e.g., 05/01/2018-05/30/2018): [Click to enter text.](#)
- b. ☐ Check the box to confirm all samples were collected no more than 12 months prior to the date of application submittal.
- c. Read the general testing requirements in the instructions for important information about sampling, test methods, and MALs. If a contact laboratory was used, attach a list which includes the name, contact information, and pollutants analyzed for each laboratory/firm.
Attachment: [Click to enter text.](#)
- d. Attach correspondence from TCEQ approving submittal of less than the required number of samples, if applicable. **Attachment:** [Click to enter text.](#)

Table 19 for Outfall No.: [Click to enter text.](#) Samples are (check one): ☐ Composite ☐ Grab

Pollutant	Sample 1 (mg/L)*	Sample 2 (mg/L)*	Sample 3 (mg/L)*	Sample 4 (mg/L)*
Calcium				
Potassium				
Sodium				

*Indicate units if different from mg/L.

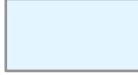
Attachment D

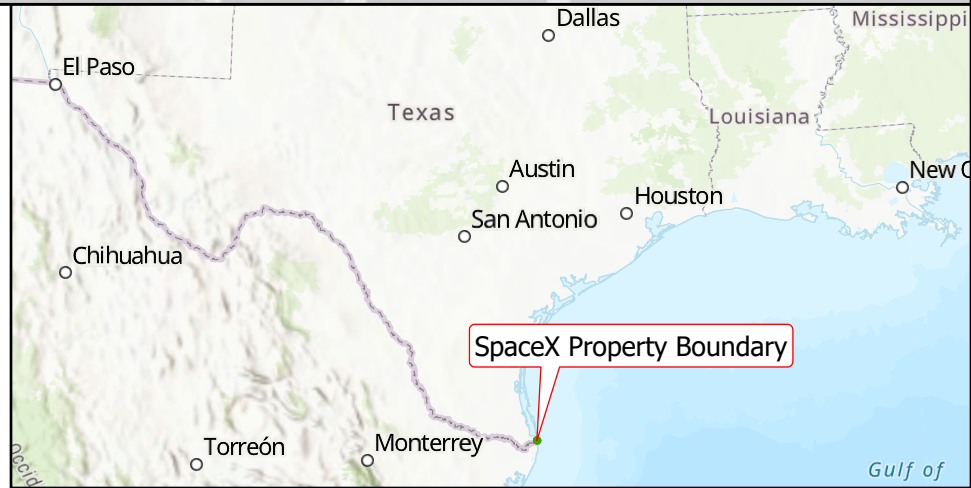


SPACEX

Launch Pad TPDES Permit

USGS Topographic Map

	SpaceX Property Boundary		Outfall & Sampling
	One-Mile Buffer		Downstream Flow
	Approximate Water Dispersal Limit		

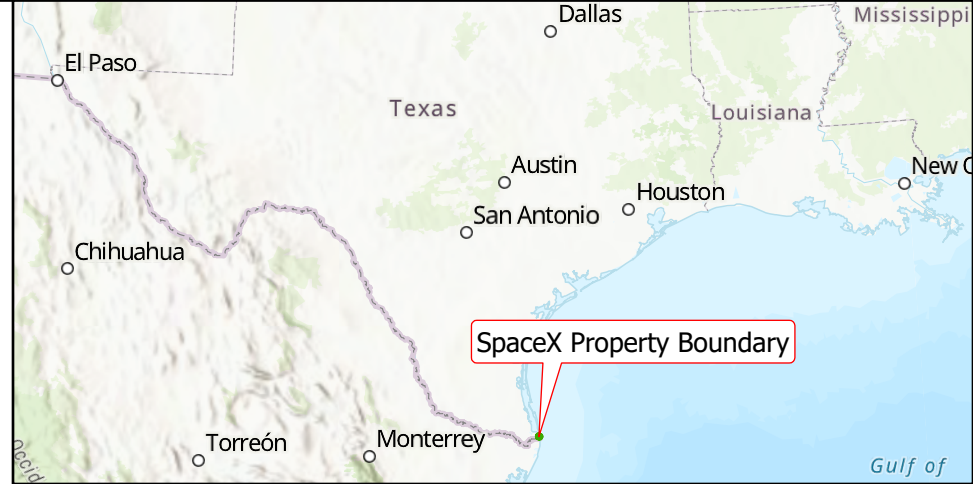


Attachment E



SPACEX Launch Pad TPDES Permit
Landowner Map

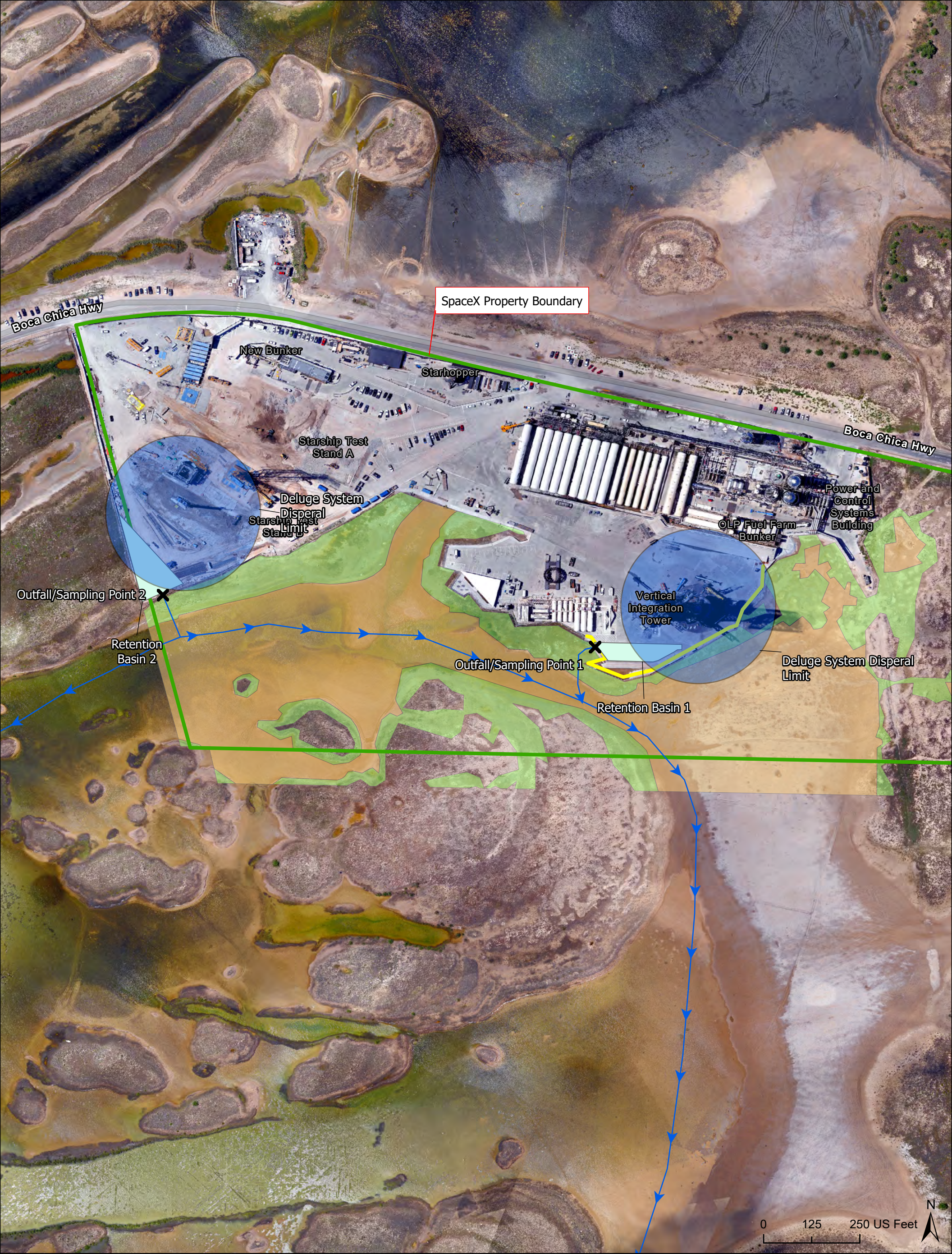
SpaceX Property Boundary	Federal
One-Mile Buffer	SpaceX
Approximate Water Dispersal Limit	TPWD
Outfall & Sampling Point	Private
Downstream Flow Line	
- 0 0.5 1 Miles



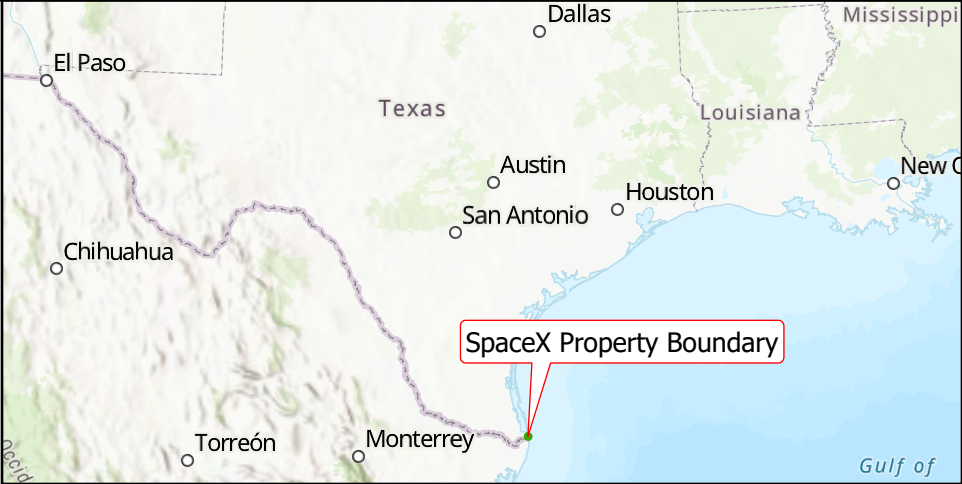
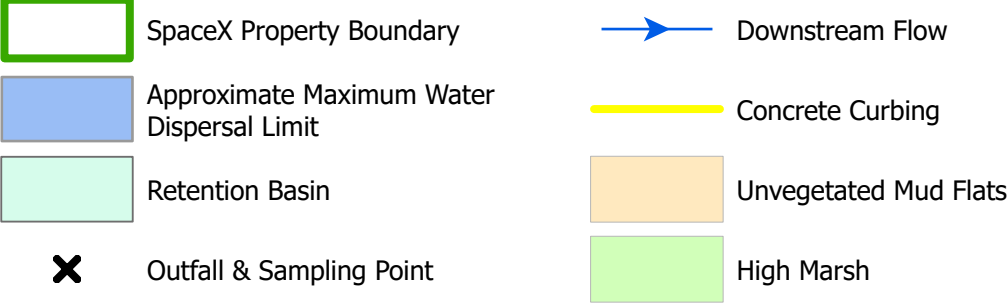
Attachment F

[illegible]

Attachment G



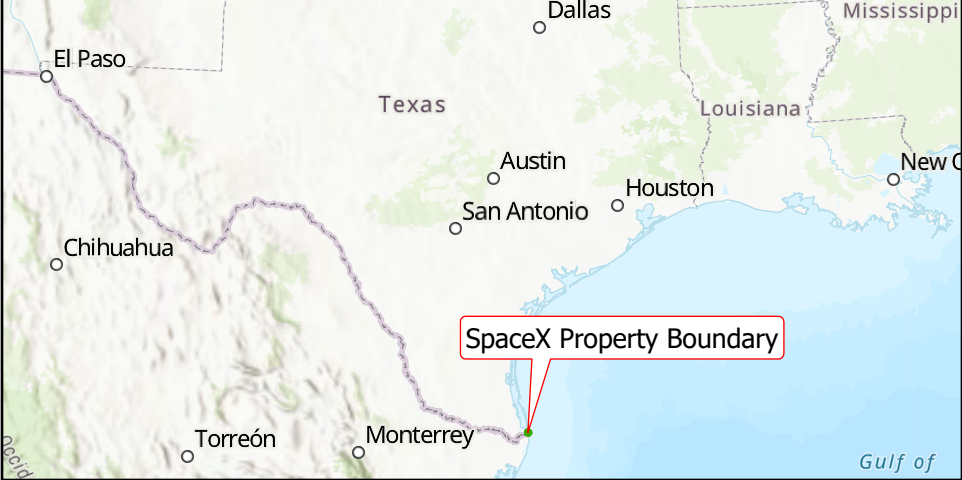
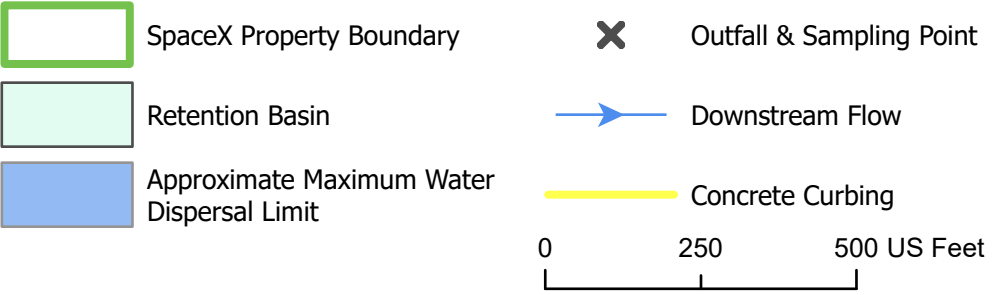
SPACEX Launch Pad TPDES Permit
Site Map



Attachment H



SPACEX Launch Pad TPDES Permit
Facility Map

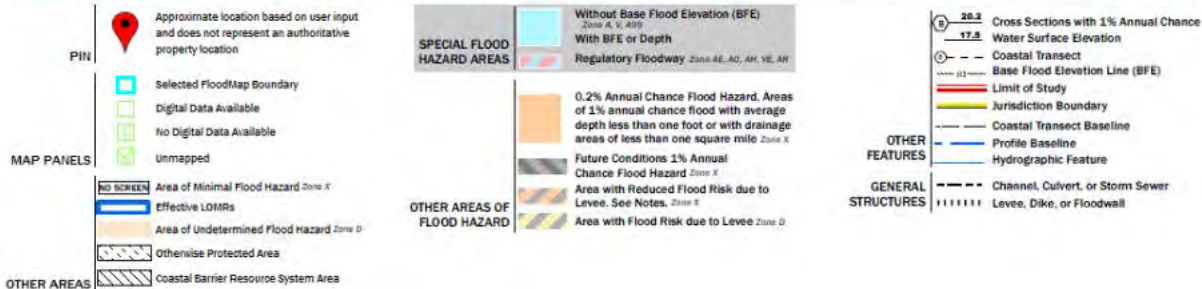


Attachment I

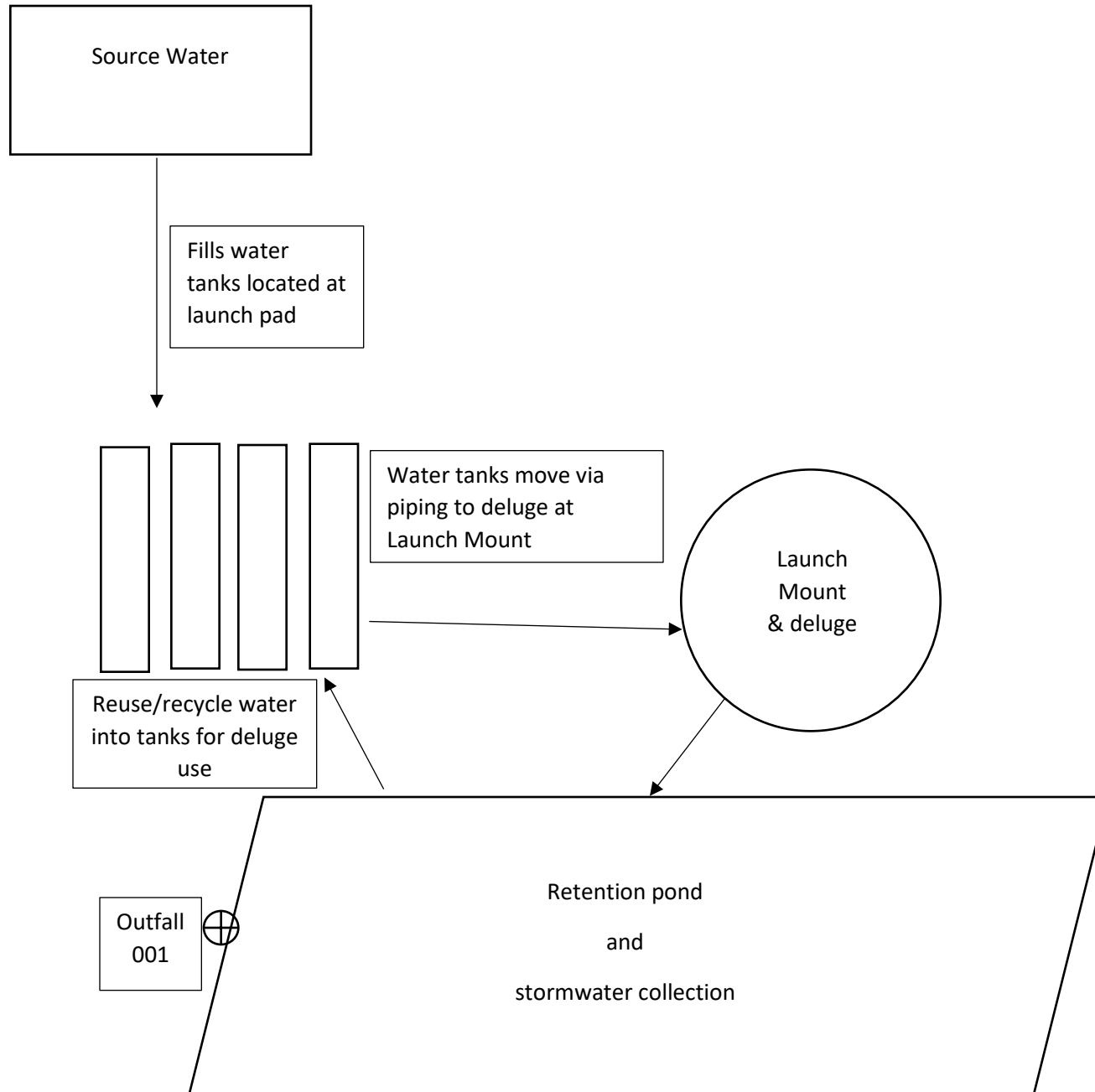


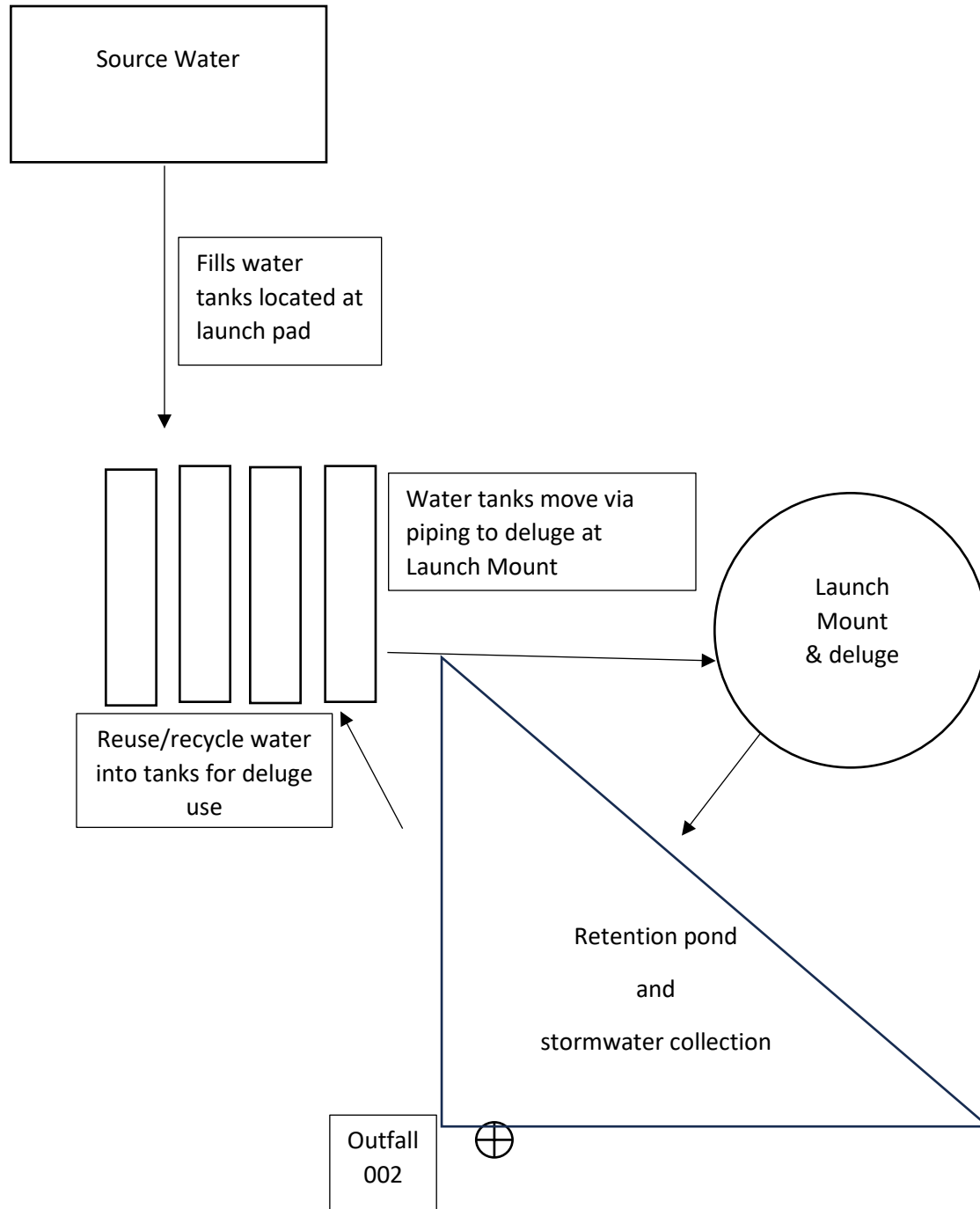
USDA, USGS The National Map; Orthoimagery. Data refreshed June, 2024.

Powered by Esri



Attachment J





Attachment K

Project
1105141

SPAC-R

SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Printed 06/26/2024
13:37

TABLE OF CONTENTS

Retention Pond

This report consists of this Table of Contents and the following pages:

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1105141_r03_03_ProjectResults	SPL Kilgore Project P:1105141 C:SPAC Project Results t:304 PO: 2605353	12
1105141_r10_05_ProjectQC	SPL Kilgore Project P:1105141 C:SPAC Project Quality Control Groups	32
1105141_r99_09_CoC__1_of_1	SPL Kilgore CoC SPAC 1105141_1_of_1	9
Total Pages:		70



SAMPLE CROSS REFERENCE

Project

1105141

Printed

6/26/2024

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SPACEX
 Rodolfo Longoria
 Space Exploration Technologies
 1 Rocket Rd
 Brownsville, TX 78521

Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

Bottle 01 Amber 32 Oz
 Bottle 02 Amber 32 Oz
 Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
 Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
 Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
 Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
 Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
 Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 11 Polyethylene 1/2 gal (White)
 Bottle 12 16 oz HNO3 Metals Plastic
 Bottle 13 8 oz Plastic H2SO4 pH < 2
 Bottle 14 8 oz Plastic H2SO4 pH < 2
 Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
 Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
 Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
 Bottle 18 Plastic 1 liter unpreserved
 Bottle 19 Cr+6 Preserved 250 Polyethylene
 Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
 Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
 Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
 Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
 Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
 Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
 Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
 Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
 Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 608.3	35	1121972	06/03/2024	1122623	06/06/2024
EPA 300.0 2.1	01	1121871	05/31/2024	1121871	05/31/2024

Email: Kilgore.ProjectManagement@spllabs.com

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SAMPLE CROSS REFERENCE

Project

1105141

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Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Printed 6/26/2024 Page 2 of 17

Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 300.0 2.1	01	1122502	06/05/2024	1122502	06/05/2024
EPA 625.1	34	1121954	06/03/2024	1124511	06/17/2024

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 624.1	04	1121678	05/30/2024	1121678	05/30/2024
EPA 624.1	07	1121680	05/30/2024	1121680	05/30/2024

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
ASTM D7065-11	36	1122298	06/05/2024	1122871	06/06/2024
EPA 200.8 5.4	30	1121672	05/31/2024	1122038	06/03/2024

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 200.7 4.4	30	1121672	05/31/2024	1123498	06/12/2024
EPA 245.1 3	31	1121865	06/03/2024	1121966	06/03/2024

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 200.8 5.4	30	1121672	05/31/2024	1123699	06/12/2024
EPA 200.8 5.4	30	1121672	05/31/2024	1123260	06/10/2024

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 200.8 5.4	30	1121672	05/31/2024	1122450	06/06/2024
SM 2320 B-2011	18	1122797	06/07/2024	1122797	06/07/2024

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
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Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 5210 B-2016	01	1121636	06/05/2024	1121636	06/05/2024
SM 5210 B-2016 (TCMP Inhibitor)	01	1121637	06/05/2024	1121637	06/05/2024

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SPACEX
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Brownsville, TX 78521

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 4500-CN ⁻ G-2016			06/04/2024		06/04/2024
SM 4500-CN ⁻ G-2016	29	1121666	05/31/2024	1122125	06/04/2024

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

Bottle 01 Amber 32 Oz
 Bottle 02 Amber 32 Oz
 Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
 Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
 Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
 Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
 Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
 Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 11 Polyethylene 1/2 gal (White)
 Bottle 12 16 oz HNO3 Metals Plastic
 Bottle 13 8 oz Plastic H2SO4 pH < 2
 Bottle 14 8 oz Plastic H2SO4 pH < 2
 Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
 Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
 Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
 Bottle 18 Plastic 1 liter unpreserved
 Bottle 19 Cr+6 Preserved 250 Polyethylene
 Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
 Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
 Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
 Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
 Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
 Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
 Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
 Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
 Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 4500-CN ⁻ E-2016	23	1121649	05/31/2024	1122121	06/04/2024
SM 5220 D-2011	13	1121775	05/31/2024	1121775	05/31/2024

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
Calculation			06/06/2024		06/06/2024
SM 3500-Cr B-2011	19	1122575	06/05/2024	1122575	06/05/2024

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Brownsville, TX 78521

Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 3500-Cr B-2011		1121254	05/29/2024	1121254	05/29/2024
EPA 1664B (HEM)	08	1122457	06/05/2024	1122457	06/05/2024

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 350.1 2	20	1121581	05/30/2024	1122206	06/04/2024
EPA 351.2 minus EPA 350.1			06/05/2024		06/05/2024

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Brownsville, TX 78521

Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 2540 C-2015	11	1122168	06/03/2024	1122168	06/03/2024
EPA 351.2 2	28	1121658	05/31/2024	1122132	06/04/2024

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SAMPLE CROSS REFERENCE

Project

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6/26/2024

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SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 5310 C-2014	15	1122326	06/05/2024	1122326	06/05/2024
SM 4500-P E-2011	13	1121996	06/03/2024	1121996	06/03/2024

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SAMPLE CROSS REFERENCE

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 2540 D-2015	11	1121687	05/30/2024	1121687	05/30/2024
SM 2130 B-2011	11	1123697	06/11/2024	1123697	06/11/2024

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SAMPLE CROSS REFERENCE

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Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
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Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
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Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 4500-H+ B-2011		1121148	05/28/2024	1121148	05/28/2024

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SPAC-R

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SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1105141

Printed: 06/26/2024

Retention Pond

RESULTS

Sample Results

2302895 RETENTION POND

Received: 05/30/2024

Non-Potable Water

Collected by: Client
Taken: 05/29/2024

SPACEX
18:30:00

PO: 2605353

Prepared: 06/19/2024 14:37:00 Analyzed 06/19/2024 14:37:00 WJP

Parameter	Results	Units	RL	Flags	CAS	Bottle
Check Limits	Completed					

ASTM D7065-11 Prepared: 1122298 06/05/2024 14:00:00 Analyzed 1122871 06/06/2024 17:35:00 DWL

Parameter	Results	Units	RL	Flags	CAS	Bottle
Nonylphenol	<33.6	ug/L	33.6		25154-52-3	36

Calculation Prepared: 06/06/2024 14:32:29 Calculated 06/06/2024 14:32:29 CAL

Parameter	Results	Units	RL	Flags	CAS	Bottle
Trivalent Chromium	<0.003	mg/L	0.003		16065-83-1	

Client Prepared: 1121027 05/28/2024 03:56:00 Analyzed 1121027 05/28/2024 03:56:00 CLI

Parameter	Results	Units	RL	Flags	CAS	Bottle
Cl2 Res(Total)Analyzed by client	0.20	mg/L				

EPA 1664B (HEM) Prepared: 1122457 06/05/2024 10:00:00 Analyzed 1122457 06/05/2024 10:00:00 MAX

Parameter	Results	Units	RL	Flags	CAS	Bottle
Oil and Grease (HEM)	3.60	mg/L	4.49	J		08

EPA 200.7 4.4 Prepared: 1121672 05/31/2024 08:00:00 Analyzed 1123498 06/12/2024 10:21:00 KBI

Parameter	Results	Units	RL	Flags	CAS	Bottle
Calcium	83.3	mg/L	0.500		7440-70-2	30
Iron, Total	0.702	mg/L	0.007		7439-89-6	30



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SPAC-R

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SPACE X
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1105141

Printed: 06/26/2024

2302895 RETENTION POND

Received: 05/30/2024

Non-Potable Water

Collected by: Client
Taken: 05/29/2024

SPACE X
18:30:00

PO: 2605353

EPA 200.8 5.4 Prepared: 1121672 05/31/2024 08:00:00 Analyzed 1122038 06/03/2024 12:30:00 JC2

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Aluminum, Total	0.0702	mg/L	0.00171		7429-90-5	30
NELAC	Arsenic, Total	0.00188	mg/L	0.0005		7440-38-2	30
NELAC	Barium, Total	0.0943	mg/L	0.001		7440-39-3	30
NELAC	Beryllium, Total	<0.000139	mg/L	0.000139		7440-41-7	30
NELAC	Cadmium, Total	0.000107	mg/L	0.001	J	7440-43-9	30
NELAC	Chromium, Total	0.00155	mg/L	0.001		7440-47-3	30
NELAC	Copper, Total	0.00949	mg/L	0.00155		7440-50-8	30
NELAC	Lead, Total	<0.000244	mg/L	0.000244		7439-92-1	30
NELAC	Nickel, Total	0.00626	mg/L	0.00112		7440-02-0	30
NELAC	Silver, Total	<0.000226	mg/L	0.000226		7440-22-4	30
NELAC	Thallium, Total	<0.000106	mg/L	0.000106		7440-28-0	30
NELAC	Zinc, Total	1.42	mg/L	0.001		7440-66-6	30

EPA 200.8 5.4 Prepared: 1121672 05/31/2024 08:00:00 Analyzed 1122450 06/06/2024 02:19:00 JC2

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Selenium, Total	0.00286	mg/L	0.002		7782-49-2	30

EPA 200.8 5.4 Prepared: 1121672 05/31/2024 08:00:00 Analyzed 1123260 06/10/2024 21:41:00 JC2

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Antimony, Total	0.00189	mg/L	0.003	J	7440-36-0	30

EPA 200.8 5.4 Prepared: 1121672 05/31/2024 08:00:00 Analyzed 1123699 06/12/2024 08:56:00 JC2

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Manganese, Total	0.059	mg/L	0.0005		7439-96-5	30

EPA 245.1 3 Prepared: 1121865 06/03/2024 10:30:00 Analyzed 1121966 06/03/2024 13:29:00 KB1

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Mercury, Total	<0.113	ug/L	0.113		7439-97-6	31

EPA 300.0 2.1 Prepared: 1121871 05/31/2024 13:17:00 Analyzed 1121871 05/31/2024 13:17:00 NAZ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Chloride	182	mg/L	3.00			01
NELAC	Fluoride	0.970	mg/L	0.500	J		01



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SPACE X
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1105141

Printed: 06/26/2024

2302895 RETENTION POND

Received: 05/30/2024

Non-Potable Water Collected by: Client SPACE X PO: 2605353
Taken: 05/29/2024 18:30:00

EPA 300.0 2.1 Prepared: 1121871 05/31/2024 13:17:00 Analyzed 1121871 05/31/2024 13:17:00 NAZ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Nitrate-Nitrogen Total	1.20	mg/L	0.100		14797-55-8	01

EPA 300.0 2.1 Prepared: 1122502 06/05/2024 13:36:00 Analyzed 1122502 06/05/2024 13:36:00 NAZ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Sulfate	282	mg/L	30.0			01

EPA 350.1 2 Prepared: 1121581 05/30/2024 15:18:42 Analyzed 1122206 06/04/2024 07:02:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Ammonia Nitrogen	0.121	mg/L	0.020			20

EPA 351.2 2 Prepared: 1121658 05/31/2024 08:22:52 Analyzed 1122132 06/04/2024 08:23:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Kjeldahl Nitrogen	0.064	mg/L	0.050		7727-37-9	28

EPA 351.2 minus EPA 350.1 Prepared: 06/05/2024 08:55:57 Calculated 06/05/2024 08:55:57 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
z	Nitrogen, Total Organic (as N)	<0.050	mg/L	0.050			

EPA 608.3 Prepared: 1121972 06/03/2024 14:30:00 Analyzed 1122623 06/06/2024 01:55:00 KAP

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	PCB-1016	<0.334	ug/L	0.334	X	12674-11-2	35
NELAC	PCB-1221	<0.331	ug/L	0.331		11104-28-2	35
NELAC	PCB-1232	<0.331	ug/L	0.331		11141-16-5	35
NELAC	PCB-1242	<0.331	ug/L	0.331		53469-21-9	35
NELAC	PCB-1248	<0.331	ug/L	0.331		12672-29-6	35
NELAC	PCB-1254	<0.331	ug/L	0.331		11097-69-1	35
NELAC	PCB-1260	<0.331	ug/L	0.331		11096-82-5	35
NELAC	PCB-1262	<0.331	ug/L	0.331		37324-23-5	35
NELAC	PCB-1268	<0.331	ug/L	0.331		11100-14-4	35



SPAC-R

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Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1105141

Printed: 06/26/2024

2302895 RETENTION POND

Received: 05/30/2024

Non-Potable Water

Collected by: Client
Taken: 05/29/2024

SPACEX
18:30:00

PO: 2605353

EPA 624.1 Prepared: 1121678 05/30/2024 17:55:00 Analyzed 1121678 05/30/2024 17:55:00 MRI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Acrolein	<4.00	ug/L	4.00	X	107-02-8	04
NELAC	Acrylonitrile	<1.00	ug/L	1.00		107-13-1	04

EPA 624.1 Prepared: 1121680 05/30/2024 19:47:00 Analyzed 1121680 05/30/2024 19:47:00 MRI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	1,1,1-Trichloroethane	<1.00	ug/L	1.00		71-55-6	07
NELAC	1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00		79-34-5	07
NELAC	1,1,2-Trichloroethane	<1.00	ug/L	1.00		79-00-5	07
NELAC	1,1-Dichloroethane	<1.00	ug/L	1.00		75-34-3	07
NELAC	1,1-Dichloroethylene	<1.00	ug/L	1.00		75-35-4	07
NELAC	1,2-Dibromoethane (EDB)	<1.00	ug/L	1.00		106-93-4	07
NELAC	1,2-Dichloroethane	<1.00	ug/L	1.00		107-06-2	07
NELAC	1,2-Dichloropropane	<1.00	ug/L	1.00		78-87-5	07
NELAC	2-Chloroethylvinyl ether	<1.00	ug/L	1.00		110-75-8	07
NELAC	Benzene	<1.00	ug/L	1.00		71-43-2	07
NELAC	Bromodichloromethane	<1.00	ug/L	1.00		75-27-4	07
NELAC	Bromoform	<1.00	ug/L	1.00		75-25-2	07
NELAC	Bromomethane (Methyl Bromi	<1.00	ug/L	1.00		74-83-9	07
NELAC	Carbon Tetrachloride	<1.00	ug/L	1.00		56-23-5	07
NELAC	Chlorobenzene	<1.00	ug/L	1.00		108-90-7	07
NELAC	Chloroethane	<1.12	ug/L	1.12		75-00-3	07
NELAC	Chloroform	<1.00	ug/L	1.00		67-66-3	07
NELAC	Chloromethane (Methyl Chloride)	<1.00	ug/L	1.00		74-87-3	07
NELAC	cis-1,3-Dichloropropene	<1.00	ug/L	1.00		10061-01-5	07
NELAC	Dibromochloromethane	<1.00	ug/L	1.00		124-48-1	07
NELAC	Dichloromethane	<1.02	ug/L	1.02		75-09-2	07
NELAC	Ethylbenzene	<1.00	ug/L	1.00		100-41-4	07
NELAC	m-Dichlorobenzene (1,3-DCB)	<1.00	ug/L	1.00		541-73-1	07
NELAC	Methyl ethyl ketone (Butanone)	<1.00	ug/L	1.00		78-93-3	07
NELAC	o-Dichlorobenzene (1,2-DCB)	<1.00	ug/L	1.00		95-50-1	07
NELAC	p-Dichlorobenzene (1,4-DCB)	<1.00	ug/L	1.00		106-46-7	07
NELAC	Tetrachloroethylene	<1.00	ug/L	1.00		127-18-4	07
NELAC	Toluene	<1.00	ug/L	1.00		108-88-3	07
NELAC	trans-1,2-Dichloroethylene	<1.00	ug/L	1.00		156-60-5	07
NELAC	trans-1,3-Dichloropropene	<1.00	ug/L	1.00		10061-02-6	07
NELAC	Trichloroethylene	<1.00	ug/L	1.00		79-01-6	07



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SPACE X
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1105141

Printed: 06/26/2024

2302895 RETENTION POND

Received: 05/30/2024

Non-Potable Water

Collected by: Client
Taken: 05/29/2024

SPACE X
18:30:00

PO: 2605353

EPA 624.1 Prepared: 1121680 05/30/2024 19:47:00 Analyzed 1121680 05/30/2024 19:47:00 MRI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Vinyl chloride	<1.00	ug/L	1.00		75-01-4	07

EPA 624.1 Prepared: 1121680 05/31/2024 12:46:07 Calculated 1121680 05/31/2024 12:46:07 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Trihalomethanes	<0.001	mg/L	0.001			07

EPA 625.1 Prepared: 1121954 06/03/2024 14:00:00 Analyzed 1124511 06/17/2024 20:50:00 PMI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	1,2,4,5-Tetrachlorobenzene	<1.02	ug/L	1.02	X	95-94-3	34
NELAC	1,2,4-Trichlorobenzene	<0.988	ug/L	0.988		120-82-1	34
NELAC	1,2-Dichlorobenzene	<4.94	ug/L	4.94		95-50-1	34
NELAC	1,2-DPH (as azobenzene)	<0.988	ug/L	0.988		122-66-7	34
NELAC	1,3-Dichlorobenzene	<4.94	ug/L	4.94	X	541-73-1	34
NELAC	1,4-Dichlorobenzene	<4.94	ug/L	4.94	X	106-46-7	34
NELAC	2,4,5-Trichlorophenol	<4.94	ug/L	4.94		95-95-4	34
NELAC	2,4,6-Trichlorophenol	<1.98	ug/L	1.98		88-06-2	34
NELAC	2,4-Dichlorophenol	<0.988	ug/L	0.988		120-83-2	34
NELAC	2,4-Dimethylphenol	<0.988	ug/L	0.988	S	105-67-9	34
NELAC	2,4-Dinitrophenol	<1.98	ug/L	1.98		51-28-5	34
NELAC	2,4-Dinitrotoluene	<1.98	ug/L	1.98		121-14-2	34
NELAC	2,6-Dinitrotoluene	<1.98	ug/L	1.98		606-20-2	34
NELAC	2-Chloronaphthalene	<0.988	ug/L	0.988		91-58-7	34
NELAC	2-Chlorophenol	<0.988	ug/L	0.988		95-57-8	34
NELAC	2-Methylphenol (o-Cresol)	<9.88	ug/L	9.88		95-48-7	34
NELAC	2-Nitrophenol	<0.988	ug/L	0.988		88-75-5	34
NELAC	3&4-Methylphenol (m&p-Cresol)	<7.91	ug/L	7.91		MEPH34	34
NELAC	3,3'-Dichlorobenzidine	<1.98	ug/L	1.98		91-94-1	34
NELAC	4,6-Dinitro-2-methylphenol	<1.98	ug/L	1.98		534-52-1	34
NELAC	4-Bromophenyl phenyl ether	<0.988	ug/L	0.988		101-55-3	34
NELAC	4-Chlorophenyl phenyl ethe	<0.988	ug/L	0.988		7005-72-3	34
NELAC	4-Nitrophenol	<0.988	ug/L	0.988		100-02-7	34
NELAC	Acenaphthene	<0.988	ug/L	0.988		83-32-9	34
NELAC	Acenaphthylene	<0.988	ug/L	0.988		208-96-8	34
z	Aniline	<2.44	ug/L	2.44	S	62-53-3	34



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SPACE X
18:30:00

PO: 2605353

EPA 625.1 Prepared: 1121954 06/03/2024 14:00:00 Analyzed 1124511 06/17/2024 20:50:00 PMI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Anthracene	<0.988	ug/L	0.988		120-12-7	34
NELAC	Benidine	<1.48	ug/L	1.48		92-87-5	34
NELAC	Benzo(a)anthracene	<0.988	ug/L	0.988		56-55-3	34
NELAC	Benzo(a)pyrene	<0.988	ug/L	0.988		50-32-8	34
NELAC	Benzo(b)fluoranthene	<0.988	ug/L	0.988		205-99-2	34
NELAC	Benzo(ghi)perylene	<0.988	ug/L	0.988		191-24-2	34
NELAC	Benzo(k)fluoranthene	<0.988	ug/L	0.988		207-08-9	34
NELAC	Benzyl Butyl phthalate	<7.41	ug/L	7.41		85-68-7	34
NELAC	Bis(2-chloroethoxy)methane	<0.988	ug/L	0.988		111-91-1	34
NELAC	Bis(2-chloroethyl)ether	<0.988	ug/L	0.988		111-44-4	34
NELAC	Bis(2-chloroisopropyl)ether	<0.988	ug/L	0.988		108-60-1	34
NELAC	Bis(2-ethylhexyl)phthalate	<7.41	ug/L	7.41		117-81-7	34
NELAC	Chrysene (Benzo(a)phenanthrene)	<0.988	ug/L	0.988		218-01-9	34
NELAC	Dibenz(a,h)anthracene	<0.988	ug/L	0.988		53-70-3	34
NELAC	Diethyl phthalate	<5.63	ug/L	5.63		84-66-2	34
NELAC	Dimethyl phthalate	<4.74	ug/L	4.74		131-11-3	34
NELAC	Di-n-butylphthalate	<7.41	ug/L	7.41		84-74-2	34
NELAC	Di-n-octylphthalate	<1.98	ug/L	1.98		117-84-0	34
NELAC	Fluoranthene(Benzo(j,k)fluorene)	<0.988	ug/L	0.988		206-44-0	34
NELAC	Fluorene	<0.988	ug/L	0.988		86-73-7	34
NELAC	Hexachlorobenzene	<0.988	ug/L	0.988		118-74-1	34
NELAC	Hexachlorobutadiene	<1.02	ug/L	1.02		87-68-3	34
NELAC	Hexachlorocyclopentadiene	<0.988	ug/L	0.988		77-47-4	34
NELAC	Hexachloroethane	<1.98	ug/L	1.98		67-72-1	34
NELAC	Indeno(1,2,3-cd)pyrene	<0.988	ug/L	0.988		193-39-5	34
NELAC	Isophorone	<0.988	ug/L	0.988		78-59-1	34
NELAC	Naphthalene	<0.988	ug/L	0.988		91-20-3	34
NELAC	Nitrobenzene	<0.988	ug/L	0.988		98-95-3	34
NELAC	n-Nitrosodiethylamine	<0.988	ug/L	0.988	X	55-18-5	34
NELAC	N-Nitrosodimethylamine	<0.988	ug/L	0.988		62-75-9	34
NELAC	n-Nitroso-di-n-butylamine	<0.988	ug/L	0.988		924-16-3	34
NELAC	N-Nitrosodi-n-propylamine	<0.988	ug/L	0.988		621-64-7	34
NELAC	N-Nitrosodiphenylamine (as DPA	<0.988	ug/L	0.988		86-30-6	34
NELAC	p-Chloro-m-Cresol (4-Chloro-3-me	<0.988	ug/L	0.988		59-50-7	34
NELAC	Pentachlorobenzene	<0.988	ug/L	0.988		608-93-5	34
NELAC	Pentachlorophenol	<4.94	ug/L	4.94		87-86-5	34



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Project
1105141

Printed: 06/26/2024

2302895 RETENTION POND

Received: 05/30/2024

Non-Potable Water

Collected by: Client
Taken: 05/29/2024

SPACE X
18:30:00

PO: 2605353

EPA 625.1 Prepared: 1121954 06/03/2024 14:00:00 Analyzed 1124511 06/17/2024 20:50:00 PMI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Phenanthrene	<0.988	ug/L	0.988		85-01-8	34
NELAC	Phenol	<0.988	ug/L	0.988		108-95-2	34
NELAC	Pyrene	<0.988	ug/L	0.988		129-00-0	34
NELAC	Pyridine	<1.33	ug/L	1.33	X	110-86-1	34

EPA 625.1 Prepared: 1121954 06/03/2024 14:00:00 Calculated 1124511 06/19/2024 13:56:10 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cresols Total	<7.91	ug/L	7.91		1319-77-3, etc.	34

SM 2130 B-2011 Prepared: 1123697 06/11/2024 15:25:00 Analyzed 1123697 06/11/2024 15:25:00 TRC

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Turbidity	2.55	NTU	0.300	H		11

SM 2320 B-2011 Prepared: 1122797 06/07/2024 09:23:00 Analyzed 1122797 06/07/2024 09:23:00 KNI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Alkalinity (as CaCO3)	136	mg/L	1.00			18

SM 2540 C-2015 Prepared: 1122168 06/03/2024 08:30:00 Analyzed 1122168 06/03/2024 08:30:00 ADR

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Dissolved Solids	950	mg/L	50.0			11

SM 2540 D-2015 Prepared: 1121687 05/30/2024 15:00:00 Analyzed 1121687 05/30/2024 15:00:00 ADR

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Suspended Solids	7.50	mg/L	2.00			11

SM 3500-Cr B-2011 Prepared: 1121254 05/29/2024 18:30:00 Analyzed 1121254 05/29/2024 18:30:00 JMZ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Hex Cr, Field Preservation	preserved	ug/L	3		18540-29-9	



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Received: 05/30/2024

Non-Potable Water

Collected by: Client
Taken: 05/29/2024

SPACE X
18:30:00

PO: 2605353

SM 3500-Cr B-2011 Prepared: 1122575 06/05/2024 09:00:00 Analyzed 1122575 06/05/2024 09:00:00 ALB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Hexavalent Chromium	<3.00	ug/L	3.00		18540-29-9	19

SM 4500-CN⁻E-2016 Prepared: 1121649 05/31/2024 07:45:07 Analyzed 1122121 06/04/2024 13:35:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cyanide, total	<0.00238	mg/L	0.00238			23

SM 4500-CN⁻G-2016 Prepared: 06/04/2024 16:15:50 Calculated 06/04/2024 16:15:50 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cyanide - Available/Amenable	<0.00238	mg/L	0.00238			

SM 4500-CN⁻G-2016 Prepared: 1121666 05/31/2024 09:01:54 Analyzed 1122125 06/04/2024 13:35:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cyanide After Chlorination	<0.00238	mg/L	0.00238			29

SM 4500-H+ B-2011 Prepared: 1121148 05/28/2024 03:56:00 Analyzed 1121148 05/28/2024 03:56:00 CLI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
z	pH Client Provided	6.97	SU	0			

SM 4500-P E-2011 Prepared: 1121996 06/03/2024 12:10:00 Analyzed 1121996 06/03/2024 12:10:00 TRC

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Phosphorus (as P), total	0.0241	mg/L	0.00311		7723-14-0	13

SM 5210 B-2016 Prepared: 1121636 05/31/2024 Analyzed 1121636 06/05/2024 13:39:32 ESN

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Biochemical Oxygen Demand (BOD5)	8.49	mg/L	2.00		1026-3	01

SM 5210 B-2016 (TCMP Inhibitor) Prepared: 1121637 05/31/2024 Analyzed 1121637 06/05/2024 12:51:39 ESN

	Parameter	Results	Units	RL	Flags	CAS	Bottle



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SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1105141

Printed: 06/26/2024

2302895 RETENTION POND

Received: 05/30/2024

Non-Potable Water Collected by: Client SPACEX PO: 2605353
Taken: 05/29/2024 18:30:00

SM 5210 B-2016 (TCMP Inhibitor) Prepared: 1121637 05/31/2024 Analyzed 1121637 06/05/2024 12:51:39 ESN

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	BOD Carbonaceous	2.08	mg/L	2.00			01

SM 5220 D-2011 Prepared: 1121775 05/31/2024 11:00:00 Analyzed 1121775 05/31/2024 11:00:00 HLT

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Chemical Oxygen Demand	<20.0	mg/L	20.0			13

SM 5310 C-2014 Prepared: 1122326 06/05/2024 12:13:00 Analyzed 1122326 06/05/2024 12:13:00 MAG

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Organic Carbon	3.53	mg/L	0.500			15

Sample Preparation

2302895 RETENTION POND

Received: 05/30/2024

05/29/2024

2605353

Prepared: 12/31/1899 10:21:18 Calculated 10:21:18 CAL

z Environmental Fee (per Project) Verified

ASTM D7065-11 Prepared: 1122298 06/05/2024 14:00:00 Analyzed 1122871 06/06/2024 17:35:00 DWL

z Nonyl Phenol Expansion Entered 36

EPA 1664B (HEM) Prepared: 1122284 06/05/2024 10:00:00 Analyzed 1122284 06/05/2024 10:00:00 MAX

NELAC O&G HEM Started Started



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SPACE X
Rodolfo Longoria
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2605353

05/29/2024

EPA 200.2 2.8		Prepared: 1121672	05/31/2024	08:00:00	Analyzed 1121672	05/31/2024	08:00:00	HLT
z	Liquid Metals Digestion	50/50	ml					12
EPA 245.1 3		Prepared: 1121865	06/03/2024	10:30:00	Analyzed 1121865	06/03/2024	10:30:00	ALB
NELAC	Mercury Liquid Metals Digestion	50/25	ml					12
EPA 350.2, Rev. 2.0		Prepared: 1121581	05/30/2024	15:18:42	Analyzed 1121581	05/30/2024	15:18:42	SRJ
NELAC	Ammonia Distillation	6/6	ml					13
EPA 351.2, Rev 2.0		Prepared: 1121658	05/31/2024	08:22:52	Analyzed 1121658	05/31/2024	08:22:52	MEG
NELAC	TKN Block Digestion	20/20	ml					14
EPA 608.3		Prepared: 1121972	06/03/2024	14:30:00	Analyzed 1121972	06/03/2024	14:30:00	MCC
	PCB Liq-Liq Extr. W/Hex Exch.	10/605	ml					01
EPA 608.3		Prepared: 1121972	06/03/2024	14:30:00	Analyzed 1122623	06/06/2024	01:55:00	KAP
NELAC	Polychlorinated Biphenyls	Entered						35
EPA 624.1		Prepared: 1121678	05/30/2024	17:55:00	Analyzed 1121678	05/30/2024	17:55:00	MR1
NELAC	Acrolein/Acrylonitrile Exp.	Entered						04
EPA 624.1		Prepared: 1121680	05/30/2024	19:47:00	Analyzed 1121680	05/30/2024	19:47:00	MR1
z	Table D-1/D-2 Volatile Expansion	Entered						07



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2605353

05/29/2024

EPA 625.1		Prepared:	1121954	06/03/2024	14:00:00	Analyzed	1121954	06/03/2024	14:00:00	MCC
Liquid-Liquid Extraction, BNA		1/1012	ml							02
EPA 625.1		Prepared:	1121954	06/03/2024	14:00:00	Analyzed	1124511	06/17/2024	20:50:00	PMI
NELAC	Table D-1/ D-2 Semivolatiles Exp	Entered								34
EPA 625.1		Prepared:	1122298	06/05/2024	14:00:00	Analyzed	1122298	06/05/2024	14:00:00	MCC
Nonylphenol Liq-Liq Extract		1/892	ml							09
SM 2540 C-2015		Prepared:	1121816	06/03/2024	08:30:00	Analyzed	1121816	06/03/2024	08:30:00	ADR
NELAC	Total Dissolved Solids Started	Started								
SM 2540 D-2011		Prepared:	1121228	05/30/2024	15:00:00	Analyzed	1121228	05/30/2024	15:00:00	ADR
NELAC	TSS Set Started	Started								
SM 4500-CN ⁻ C-2016		Prepared:	1121649	05/31/2024	07:45:07	Analyzed	1121649	05/31/2024	07:45:07	MEG
NELAC	Cyanide Distillation	10/5	ml							17
SM 4500-CN ⁻ C-2016		Prepared:	1121666	05/31/2024	09:01:54	Analyzed	1121666	05/31/2024	09:01:54	MEG
NELAC	CN Dist After Chlorination	10/5	ml							17
SM 5210 B-2016		Prepared:	1121636	05/31/2024		Analyzed	1121636	05/31/2024	06:51:30	ESN
NELAC	BOD Set Started	Started								



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2302895 RETENTION POND

Received: 05/30/2024
 2605353

05/29/2024

SM 5210 B-2016 (TCMP Inhibitor)

Prepared: 1121637 05/31/2024

Analyzed 1121637 05/31/2024 06:51:30 ESN

NELAC **BODc Set Started**

Started

Qualifiers:

J - Analyte detected below quantitation limit
 X - Standard reads higher than desired.
 H - Sample started outside recommended holding time
 S - Standard reads lower than desired

We report results on an As Received (or Wet) basis unless marked Dry Weight.

Unless otherwise noted, testing was performed at SPL, Inc.- Kilgore laboratory which holds International, Federal, and state accreditations. Please see our Websites for details.

(N)ELAC - Covered in our NELAC scope of accreditation
 z -- Not covered by our NELAC scope of accreditation

These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of SPL Kilgore. Unless otherwise specified, these test results meet the requirements of NELAC.
 RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.



Bill Peery, MS, VP Technical Services



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QUALITY CONTROL



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SPAC-R

SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1105141

Printed 06/26/2024

Analytical Set

1121636

SM 5210 B-2016

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Biochemical Oxygen Demand (BOD5)	1121636	0.2	0.200	0.500	mg/L	126385424
Biochemical Oxygen Demand (BOD5)	1121636	0.2	0.200	0.500	mg/L	126385476
Biochemical Oxygen Demand (BOD5)	1121636	0.2	0.200	0.500	mg/L	126385536

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Biochemical Oxygen Demand (BOD5)	2302815	17.2	18.0	mg/L	4.55	30.0
Biochemical Oxygen Demand (BOD5)	2302842	64.2	62.7	mg/L	2.36	30.0
Biochemical Oxygen Demand (BOD5)	2302972	8.48	11.4	mg/L	29.4	30.0
Biochemical Oxygen Demand (BOD5)	2303089	91.2	81.3	mg/L	11.5	30.0
Biochemical Oxygen Demand (BOD5)	2303148	9.52	9.70	mg/L	1.87	30.0
Biochemical Oxygen Demand (BOD5)	2303336	40.9	30.4	mg/L	29.5	30.0
Biochemical Oxygen Demand (BOD5)	2303410	4.83	4.19	mg/L	14.2	30.0

Seed Drop

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Biochemical Oxygen Demand (BOD5)	1121636	0.697	0.200	0.500	mg/L	126385426
Biochemical Oxygen Demand (BOD5)	1121636	0.850	0.200	0.500	mg/L	126385478
Biochemical Oxygen Demand (BOD5)	1121636	1.04	0.200	0.500	mg/L	126385538

Standard

Parameter	Sample	Reading	Known	Units	Recover%	Limits%	File
Biochemical Oxygen Demand (BOD5)		226	198	mg/L	114	83.7 - 116	126385427
Biochemical Oxygen Demand (BOD5)		218	198	mg/L	110	83.7 - 116	126385479
Biochemical Oxygen Demand (BOD5)		216	198	mg/L	109	83.7 - 116	126385539

Analytical Set

1121637

SM 5210 B-2016 (TCMP Inhibitor)

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
BOD Carbonaceous	1121637	0.2	0.200	0.500	mg/L	126385562
BOD Carbonaceous	1121637	0.2	0.200	0.500	mg/L	126385614
BOD Carbonaceous	1121637	0.2	0.200	0.500	mg/L	126385664

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
BOD Carbonaceous	2302827	3.48	3.04	mg/L	13.5	30.0
BOD Carbonaceous	2302936	ND	ND	mg/L		30.0
BOD Carbonaceous	2303036	3.00	2.84	mg/L	5.48	30.0
BOD Carbonaceous	2303169	2.40	ND	mg/L	200 *	30.0
BOD Carbonaceous	2303211	2.48	2.28	mg/L	8.40	30.0

Seed Drop

Parameter	PrepSet	Reading	MDL	MQL	Units	File
BOD Carbonaceous	1121637	0.830	0.200	0.500	mg/L	126385564
BOD Carbonaceous	1121637	0.880	0.200	0.500	mg/L	126385616

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SPAC-R

SPACEX
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Space Exploration Technologies
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Brownsville, TX 78521

Project
1105141

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Seed Drop

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
BOD Carbonaceous	1121637	0.840	0.200	0.500	mg/L	126385666

Standard

<u>Parameter</u>	<u>Sample</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
BOD Carbonaceous		226	198	mg/L	114	83.7 - 116	126385565
BOD Carbonaceous		217	198	mg/L	110	83.7 - 116	126385617
BOD Carbonaceous		219	198	mg/L	111	83.7 - 116	126385667

Analytical Set

1122121

SM 4500-CN⁻ E-2016

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Cyanide, total	1121649	ND	0.00238	0.005	mg/L	126398027

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Cyanide, total	0.518	0.500	mg/L	104	90.0 - 110	126398017
Cyanide, total	0.536	0.500	mg/L	107	90.0 - 110	126398028
Cyanide, total	0.534	0.500	mg/L	107	90.0 - 110	126398035
Cyanide, total	0.522	0.500	mg/L	104	90.0 - 110	126398036
Cyanide, total	0.534	0.500	mg/L	107	90.0 - 110	126398037
Cyanide, total	0.536	0.500	mg/L	107	90.0 - 110	126398038
Cyanide, total	0.540	0.500	mg/L	108	90.0 - 110	126398039
Cyanide, total	0.522	0.500	mg/L	104	90.0 - 110	126398040
Cyanide, total	0.536	0.500	mg/L	107	90.0 - 110	126398048
Cyanide, total	0.527	0.500	mg/L	105	90.0 - 110	126398059

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Cyanide, total	2302895	ND	ND	mg/L		20.0

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Cyanide, total	0.199	0.200	mg/L	99.5	90.0 - 110	126398016

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Cyanide, total	1121649	0.361	0.364	0.400	90.0 - 110	90.2	91.0	mg/L	0.828	20.0

Mat. Spike

<u>Parameter</u>	<u>Sample</u>	<u>Spike</u>	<u>Unknown</u>	<u>Known</u>	<u>Units</u>	<u>Recovery %</u>	<u>Limits %</u>	<u>File</u>
Cyanide, total	2302895	0.362	ND	0.400	mg/L	90.5	90.0 - 110	126398033

Analytical Set

1122125

SM 4500-CN⁻ G-2016

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Cyanide After Chlorination	1121666	ND	0.00119	0.0025	mg/L	126398194

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CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Cyanide After Chlorination	0.518	0.500	mg/L	104	90.0 - 110	126398189
Cyanide After Chlorination	0.536	0.500	mg/L	107	90.0 - 110	126398190
Cyanide After Chlorination	0.534	0.500	mg/L	107	90.0 - 110	126398191
Cyanide After Chlorination	0.522	0.500	mg/L	104	90.0 - 110	126398192
Cyanide After Chlorination	0.534	0.500	mg/L	107	90.0 - 110	126398193
Cyanide After Chlorination	0.536	0.500	mg/L	107	90.0 - 110	126398200
Cyanide After Chlorination	0.540	0.500	mg/L	108	90.0 - 110	126398204
Cyanide After Chlorination	0.522	0.500	mg/L	104	90.0 - 110	126398215
Cyanide After Chlorination	0.536	0.500	mg/L	107	90.0 - 110	126398219
Cyanide After Chlorination	0.527	0.500	mg/L	105	90.0 - 110	126398220

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Cyanide After Chlorination	2302508	ND	ND	mg/L		20.0

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Cyanide After Chlorination	0.199	0.200	mg/L	99.5	90.0 - 110	126398188

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Cyanide After Chlorination	1121666	0.181	0.182	0.200	90.0 - 110	90.5	91.0	mg/L	0.551	20.0

Mat. Spike

<u>Parameter</u>	<u>Sample</u>	<u>Spike</u>	<u>Unknown</u>	<u>Known</u>	<u>Units</u>	<u>Recovery %</u>	<u>Limits %</u>	<u>File</u>
Cyanide After Chlorination	2302508	0.361	ND	0.400	mg/L	90.2	90.0 - 110	126398199

Analytical Set

1122132

EPA 351.2 2

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>SQL</u>	<u>Units</u>	<u>File</u>
Total Kjeldahl Nitrogen	1121658	ND	0.00712	0.050	mg/L	126398380

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Total Kjeldahl Nitrogen	5.49	5.00	mg/L	110	90.0 - 110	126398368
Total Kjeldahl Nitrogen	5.20	5.00	mg/L	104	90.0 - 110	126398377
Total Kjeldahl Nitrogen	5.49	5.00	mg/L	110	90.0 - 110	126398388
Total Kjeldahl Nitrogen	5.49	5.00	mg/L	110	90.0 - 110	126398399
Total Kjeldahl Nitrogen	5.47	5.00	mg/L	109	90.0 - 110	126398410
Total Kjeldahl Nitrogen	5.44	5.00	mg/L	109	90.0 - 110	126398421
Total Kjeldahl Nitrogen	5.35	5.00	mg/L	107	90.0 - 110	126398432
Total Kjeldahl Nitrogen	5.29	5.00	mg/L	106	90.0 - 110	126398436
Total Kjeldahl Nitrogen	5.37	5.00	mg/L	107	90.0 - 110	126398437
Total Kjeldahl Nitrogen	4.93	5.00	mg/L	98.6	90.0 - 110	126398447
Total Kjeldahl Nitrogen	5.33	5.00	mg/L	107	90.0 - 110	126398448
Total Kjeldahl Nitrogen	5.30	5.00	mg/L	106	90.0 - 110	126398449

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Duplicate						
<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Total Kjeldahl Nitrogen	2302945	ND	ND	mg/L		20.0
Total Kjeldahl Nitrogen	2303187	ND	ND	mg/L		20.0

ICV						
<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Total Kjeldahl Nitrogen	5.36	5.00	mg/L	107	90.0 - 110	126398367

LCS Dup										
<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Total Kjeldahl Nitrogen	1121658	4.73	4.67	5.00	90.0 - 110	94.6	93.4	mg/L	1.28	20.0

Mat. Spike										
<u>Parameter</u>	<u>Sample</u>	<u>Spike</u>	<u>Unknown</u>	<u>Known</u>	<u>Units</u>	<u>Recovery %</u>	<u>Limits %</u>	<u>File</u>		
Total Kjeldahl Nitrogen	2302945	-0.541	ND	5.00	mg/L	0	80.0 - 120	126398385	*	
Total Kjeldahl Nitrogen	2303187	4.77	ND	5.00	mg/L	95.4	80.0 - 120	126398389		

Analytical Set 1122206

EPA 350.1 2

Blank						
<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Ammonia Nitrogen	1121581	ND	0.00336	0.020	mg/L	126399578

CCV						
<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Ammonia Nitrogen	2.11	2.00	mg/L	106	90.0 - 110	126399560
Ammonia Nitrogen	2.17	2.00	mg/L	108	90.0 - 110	126399569
Ammonia Nitrogen	2.18	2.00	mg/L	109	90.0 - 110	126399576
Ammonia Nitrogen	2.18	2.00	mg/L	109	90.0 - 110	126399587
Ammonia Nitrogen	2.14	2.00	mg/L	107	90.0 - 110	126399598
Ammonia Nitrogen	2.05	2.00	mg/L	102	90.0 - 110	126399608
Ammonia Nitrogen	2.13	2.00	mg/L	106	90.0 - 110	126399616
Ammonia Nitrogen	2.15	2.00	mg/L	108	90.0 - 110	126399619
Ammonia Nitrogen	2.18	2.00	mg/L	109	90.0 - 110	126399628
Ammonia Nitrogen	2.17	2.00	mg/L	108	90.0 - 110	126399639
Ammonia Nitrogen	2.14	2.00	mg/L	107	90.0 - 110	126399647
Ammonia Nitrogen	2.12	2.00	mg/L	106	90.0 - 110	126399658
Ammonia Nitrogen	2.12	2.00	mg/L	106	90.0 - 110	126399668
Ammonia Nitrogen	2.10	2.00	mg/L	105	90.0 - 110	126399672
Ammonia Nitrogen	2.12	2.00	mg/L	106	90.0 - 110	126399677
Ammonia Nitrogen	2.15	2.00	mg/L	108	90.0 - 110	126399685
Ammonia Nitrogen	2.12	2.00	mg/L	106	90.0 - 110	126399696
Ammonia Nitrogen	2.14	2.00	mg/L	107	90.0 - 110	126399707
Ammonia Nitrogen	2.10	2.00	mg/L	105	90.0 - 110	126399715
Ammonia Nitrogen	2.11	2.00	mg/L	106	90.0 - 110	126399717

Duplicate						
<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>

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Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Ammonia Nitrogen	2302876	0.138	0.142	mg/L	2.86	20.0
Ammonia Nitrogen	2302888	0.090	0.086	mg/L	4.55	20.0

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Ammonia Nitrogen	2.18	2.00	mg/L	109	90.0 - 110	126399559

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Ammonia Nitrogen	1121581	2.09	2.10	2.00	90.0 - 110	104	105	mg/L	0.477	20.0

Mat. Spike

<u>Parameter</u>	<u>Sample</u>	<u>Spike</u>	<u>Unknown</u>	<u>Known</u>	<u>Units</u>	<u>Recovery %</u>	<u>Limits %</u>	<u>File</u>
Ammonia Nitrogen	2302876	2.11	0.142	2.00	mg/L	98.4	80.0 - 120	126399583
Ammonia Nitrogen	2302888	2.19	0.086	2.00	mg/L	105	80.0 - 120	126399586

Analytical Set

1121687

SM 2540 D-2015

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Total Suspended Solids	1121687	ND	2	2	mg/L	126387239

ControlBlk

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Total Suspended Solids	1121687	-0.0001			grams	126387238

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Total Suspended Solids	2302808	10.6	10.3	mg/L	2.87	20.0
Total Suspended Solids	2302810	8.48	8.26	mg/L	2.63	20.0

LCS

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits</u>	<u>File</u>
Total Suspended Solids	1121687	54.0	50.0	mg/L	108	90.0 - 110	126387257

Standard

<u>Parameter</u>	<u>Sample</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Total Suspended Solids		108	100	mg/L	108	90.0 - 110	126387256

Analytical Set

1122168

SM 2540 C-2015

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Total Dissolved Solids	1122168	5.00	5.00	5.00	mg/L	126398839

ControlBlk

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Total Dissolved Solids	1122168	0.0005			grams	126398826

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SPAC-R

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Duplicate						
Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Total Dissolved Solids	2302642	18.0	ND	mg/L	200 *	20.0

LCS						
Parameter	PrepSet	Reading	Known	Units	Recover%	File
Total Dissolved Solids	1122168	198	200	mg/L	99.0	126398840

Standard						
Parameter	Sample	Reading	Known	Units	Recover%	File
Total Dissolved Solids		90.0	100	mg/L	90.0	126398827

Analytical Set **1122457** EPA 1664B (HEM)

Blank						
Parameter	PrepSet	Reading	MDL	MQL	Units	File
Oil and Grease (HEM)	1122457	ND	0.804	4.00	mg/L	126408507

ControlBlk						
Parameter	PrepSet	Reading	MDL	MQL	Units	File
Oil and Grease (HEM)	1122457	0.0005			grams	126408506
Oil and Grease (HEM)	1122457	0.0001			grams	126408531

LCS						
Parameter	PrepSet	Reading	Known	Units	Recover%	File
Oil and Grease (HEM)	1122457	37.4	40.0	mg/L	93.5	126408508

MS										
Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD
Oil and Grease (HEM)	2302895	39.9	0	3.60	40.0	78.0 - 114	99.8		mg/L	20.0

Analytical Set **1121871** EPA 300.0 2.1

AWRL/LOQ C						
Parameter	Reading	Known	Units	Recover%	Limits%	File
Fluoride	0.120	0.100	mg/L	120	70.0 - 130	126391539
Nitrate-Nitrogen Total	0.021	0.0226	mg/L	92.9	70.0 - 130	126391539

Blank						
Parameter	PrepSet	Reading	MDL	MQL	Units	File
Chloride	1121871	ND	0.0972	0.300	mg/L	126391540
Fluoride	1121871	ND	0.010	0.100	mg/L	126391540
Nitrate-Nitrogen Total	1121871	ND	0.00745	0.0226	mg/L	126391540

CCB						
Parameter	PrepSet	Reading	MDL	MQL	Units	File
Chloride	1121871	0.025	0.0972	0.300	mg/L	126391536
Chloride	1121871	0.012	0.0972	0.300	mg/L	126391552
Chloride	1121871	0.030	0.0972	0.300	mg/L	126391568
Fluoride	1121871	0	0.010	0.100	mg/L	126391536
Fluoride	1121871	0	0.010	0.100	mg/L	126391552

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CCB

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Fluoride	1121871	0	0.010	0.100	mg/L	126391568
Nitrate-Nitrogen Total	1121871	0	0.00745	0.0226	mg/L	126391536
Nitrate-Nitrogen Total	1121871	0	0.00745	0.0226	mg/L	126391552
Nitrate-Nitrogen Total	1121871	0	0.00745	0.0226	mg/L	126391568

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Chloride	10.4	10.0	mg/L	104	90.0 - 110	126391535
Chloride	9.99	10.0	mg/L	99.9	90.0 - 110	126391551
Chloride	10.0	10.0	mg/L	100	90.0 - 110	126391567
Fluoride	10.0	10.0	mg/L	100	90.0 - 110	126391535
Fluoride	9.92	10.0	mg/L	99.2	90.0 - 110	126391551
Fluoride	9.88	10.0	mg/L	98.8	90.0 - 110	126391567
Nitrate-Nitrogen Total	2.31	2.26	mg/L	102	90.0 - 110	126391535
Nitrate-Nitrogen Total	2.25	2.26	mg/L	99.6	90.0 - 110	126391551
Nitrate-Nitrogen Total	2.21	2.26	mg/L	97.8	90.0 - 110	126391567

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Chloride	1121871	5.08	5.01	5.00	85.0 - 115	102	100	mg/L	1.39	20.0
Fluoride	1121871	4.81	4.77	5.00	88.0 - 120	96.2	95.4	mg/L	0.835	20.0
Nitrate-Nitrogen Total	1121871	1.13	1.10	1.13	88.0 - 116	100	97.3	mg/L	2.69	20.0

MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Chloride	2302484	323	323	231	100	80.0 - 120	92.0	92.0	mg/L	0	20.0
Fluoride	2302484	88.6	90.5	ND	100	80.0 - 120	88.6	90.5	mg/L	2.12	20.0
Nitrate-Nitrogen Total	2302484	22.0	22.0	0.767	22.6	80.0 - 120	94.0	94.0	mg/L	0	20.0
Chloride	2302487	1880	1840	1690	200	80.0 - 120	95.0	75.0 *	mg/L	23.5 *	20.0
Fluoride	2302487	176	177	ND	200	80.0 - 120	88.0	88.5	mg/L	0.567	20.0
Nitrate-Nitrogen Total	2302487	44.9	43.9	1.72	45.2	80.0 - 120	95.5	93.3	mg/L	2.34	20.0

Analytical Set

1122502

EPA 300.0 2.1

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Sulfate	1122502	ND	0.254	0.300	mg/L	126409510

CCB

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Sulfate	1122502	0	0.254	0.300	mg/L	126409506
Sulfate	1122502	0	0.254	0.300	mg/L	126409526
Sulfate	1122502	0	0.254	0.300	mg/L	126409538

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Sulfate	9.79	10.0	mg/L	97.9	90.0 - 110	126409505

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SPAC-R

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Brownsville, TX 78521

Project
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CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Sulfate	9.56	10.0	mg/L	95.6	90.0 - 110	126409525
Sulfate	9.60	10.0	mg/L	96.0	90.0 - 110	126409537

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Sulfate	1122502	4.68	4.68	5.00	85.0 - 115	93.6	93.6	mg/L	0	20.0

MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Sulfate	2302895	362	367	282	100	80.0 - 120	80.0	85.0	mg/L	6.06	20.0
Sulfate	2303362	411	401	340	100	80.0 - 120	71.0 *	61.0 *	mg/L	15.2	20.0

Analytical Set

1121966

EPA 245.1 3

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Mercury, Total	1121865	ND	0.113	0.200	ug/L	126393298

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Mercury, Total	4.89	5.000	ug/L	97.8	90.0 - 110	126393282
Mercury, Total	4.90	5.000	ug/L	98.0	90.0 - 110	126393283
Mercury, Total	4.84	5.000	ug/L	96.8	90.0 - 110	126393297
Mercury, Total	4.77	5.000	ug/L	95.4	90.0 - 110	126393304
Mercury, Total	4.81	5.000	ug/L	96.2	90.0 - 110	126393311

ICL

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Mercury, Total	19.9	20.00	ug/L	99.5	90.0 - 110	126393281

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Mercury, Total	4.98	5.000	ug/L	99.6	90.0 - 110	126393280

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Mercury, Total	1121865	8.94	8.99	10.0	85.0 - 115	89.4	89.9	ug/L	0.558	20.0

MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Mercury, Total	2302895	8.99	9.05	ND	10.0	70.0 - 130	89.9	90.5	ug/L	0.665	20.0

Analytical Set

1122038

EPA 200.8 5.4

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Aluminum, Total	1121672	ND	0.00171	0.00171	mg/L	126395960
Arsenic, Total	1121672	ND	0.000184	0.001	mg/L	126395960
Barium, Total	1121672	ND	0.000635	0.001	mg/L	126395960

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SPACEX
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Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Beryllium, Total	1121672	ND	0.000139	0.001	mg/L	126395960
Cadmium, Total	1121672	ND	0.000067	0.001	mg/L	126395960
Chromium, Total	1121672	ND	0.000621	0.001	mg/L	126395960
Copper, Total	1121672	ND	0.00155	0.00155	mg/L	126395960
Lead, Total	1121672	ND	0.000244	0.001	mg/L	126395960
Nickel, Total	1121672	ND	0.00112	0.00112	mg/L	126395960
Silver, Total	1121672	ND	0.000226	0.001	mg/L	126395960
Thallium, Total	1121672	ND	0.000106	0.001	mg/L	126395960
Zinc, Total	1121672	ND	0.000875	0.001	mg/L	126395960

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Aluminum, Total	0.050	0.05	mg/L	100	90.0 - 110	126395958
Aluminum, Total	0.050	0.05	mg/L	100	90.0 - 110	126395959
Aluminum, Total	0.0501	0.05	mg/L	100	90.0 - 110	126395966
Aluminum, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126395971
Aluminum, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126396000
Aluminum, Total	0.0495	0.05	mg/L	99.0	90.0 - 110	126396005
Aluminum, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126396011
Aluminum, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126396017
Aluminum, Total	0.0499	0.05	mg/L	99.8	90.0 - 110	126396024
Aluminum, Total	0.0503	0.05	mg/L	101	90.0 - 110	126396034
Aluminum, Total	0.0541	0.05	mg/L	108	90.0 - 110	126396066
Aluminum, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126396077
Aluminum, Total	0.0503	0.05	mg/L	101	90.0 - 110	126396083
Arsenic, Total	0.0485	0.05	mg/L	97.0	90.0 - 110	126395959
Arsenic, Total	0.0478	0.05	mg/L	95.6	90.0 - 110	126395966
Arsenic, Total	0.0483	0.05	mg/L	96.6	90.0 - 110	126395971
Arsenic, Total	0.0488	0.05	mg/L	97.6	90.0 - 110	126396005
Arsenic, Total	0.0471	0.05	mg/L	94.2	90.0 - 110	126396011
Arsenic, Total	0.0463	0.05	mg/L	92.6	90.0 - 110	126396017
Barium, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126395959
Barium, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126395966
Barium, Total	0.0499	0.05	mg/L	99.8	90.0 - 110	126395971
Barium, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126396000
Barium, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126396005
Barium, Total	0.0484	0.05	mg/L	96.8	90.0 - 110	126396011
Barium, Total	0.0485	0.05	mg/L	97.0	90.0 - 110	126396017
Barium, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126396024
Beryllium, Total	0.0507	0.05	mg/L	101	90.0 - 110	126395959
Beryllium, Total	0.0502	0.05	mg/L	100	90.0 - 110	126395966
Beryllium, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126395971
Cadmium, Total	0.0504	0.05	mg/L	101	90.0 - 110	126395958
Cadmium, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126395959
Cadmium, Total	0.0495	0.05	mg/L	99.0	90.0 - 110	126395966

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Parameter	Reading	Known	Units	Recover%	Limits%	File
Cadmium, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126395971
Cadmium, Total	0.048	0.05	mg/L	96.0	90.0 - 110	126396005
Cadmium, Total	0.0484	0.05	mg/L	96.8	90.0 - 110	126396011
Cadmium, Total	0.0484	0.05	mg/L	96.8	90.0 - 110	126396017
Chromium, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126395959
Chromium, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126395966
Chromium, Total	0.0487	0.05	mg/L	97.4	90.0 - 110	126395971
Chromium, Total	0.0518	0.05	mg/L	104	90.0 - 110	126395972
Chromium, Total	0.0487	0.05	mg/L	97.4	90.0 - 110	126395973
Chromium, Total	0.0474	0.05	mg/L	94.8	90.0 - 110	126395980
Chromium, Total	0.0461	0.05	mg/L	92.2	90.0 - 110	126395986
Chromium, Total	0.0467	0.05	mg/L	93.4	90.0 - 110	126395992
Chromium, Total	0.0466	0.05	mg/L	93.2	90.0 - 110	126396000
Chromium, Total	0.0468	0.05	mg/L	93.6	90.0 - 110	126396005
Chromium, Total	0.047	0.05	mg/L	94.0	90.0 - 110	126396011
Chromium, Total	0.0466	0.05	mg/L	93.2	90.0 - 110	126396017
Chromium, Total	0.0473	0.05	mg/L	94.6	90.0 - 110	126396024
Copper, Total	0.0488	0.05	mg/L	97.6	90.0 - 110	126395959
Copper, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126395966
Copper, Total	0.0487	0.05	mg/L	97.4	90.0 - 110	126395971
Copper, Total	0.0463	0.05	mg/L	92.6	90.0 - 110	126396005
Copper, Total	0.0457	0.05	mg/L	91.4	90.0 - 110	126396011
Copper, Total	0.0465	0.05	mg/L	93.0	90.0 - 110	126396017
Copper, Total	0.0476	0.05	mg/L	95.2	90.0 - 110	126396024
Copper, Total	0.047	0.05	mg/L	94.0	90.0 - 110	126396034
Copper, Total	0.0471	0.05	mg/L	94.2	90.0 - 110	126396045
Copper, Total	0.0472	0.05	mg/L	94.4	90.0 - 110	126396056
Copper, Total	0.0466	0.05	mg/L	93.2	90.0 - 110	126396066
Copper, Total	0.0467	0.05	mg/L	93.4	90.0 - 110	126396077
Copper, Total	0.047	0.05	mg/L	94.0	90.0 - 110	126396083
Copper, Total	0.0462	0.05	mg/L	92.4	90.0 - 110	126396094
Copper, Total	0.047	0.05	mg/L	94.0	90.0 - 110	126396105
Copper, Total	0.0462	0.05	mg/L	92.4	90.0 - 110	126396110
Lead, Total	0.0495	0.05	mg/L	99.0	90.0 - 110	126395959
Lead, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126395966
Lead, Total	0.0492	0.05	mg/L	98.4	90.0 - 110	126395971
Lead, Total	0.047	0.05	mg/L	94.0	90.0 - 110	126395980
Lead, Total	0.0465	0.05	mg/L	93.0	90.0 - 110	126395986
Lead, Total	0.047	0.05	mg/L	94.0	90.0 - 110	126395992
Lead, Total	0.0472	0.05	mg/L	94.4	90.0 - 110	126396000
Lead, Total	0.0471	0.05	mg/L	94.2	90.0 - 110	126396005
Lead, Total	0.0477	0.05	mg/L	95.4	90.0 - 110	126396011
Lead, Total	0.0477	0.05	mg/L	95.4	90.0 - 110	126396017
Lead, Total	0.0486	0.05	mg/L	97.2	90.0 - 110	126396024
Lead, Total	0.0492	0.05	mg/L	98.4	90.0 - 110	126396034

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SPAC-R

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CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Lead, Total	0.0492	0.05	mg/L	98.4	90.0 - 110	126396045
Lead, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126396056
Lead, Total	0.0488	0.05	mg/L	97.6	90.0 - 110	126396066
Lead, Total	0.0485	0.05	mg/L	97.0	90.0 - 110	126396077
Lead, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126396083
Lead, Total	0.0495	0.05	mg/L	99.0	90.0 - 110	126396094
Lead, Total	0.0478	0.05	mg/L	95.6	90.0 - 110	126396105
Lead, Total	0.0484	0.05	mg/L	96.8	90.0 - 110	126396110
Nickel, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126395959
Nickel, Total	0.0485	0.05	mg/L	97.0	90.0 - 110	126395966
Nickel, Total	0.0479	0.05	mg/L	95.8	90.0 - 110	126395971
Nickel, Total	0.0484	0.05	mg/L	96.8	90.0 - 110	126396005
Nickel, Total	0.0488	0.05	mg/L	97.6	90.0 - 110	126396011
Nickel, Total	0.0486	0.05	mg/L	97.2	90.0 - 110	126396017
Silver, Total	0.0542	0.05	mg/L	108	90.0 - 110	126395958
Silver, Total	0.0538	0.05	mg/L	108	90.0 - 110	126395959
Silver, Total	0.0537	0.05	mg/L	107	90.0 - 110	126395966
Silver, Total	0.0536	0.05	mg/L	107	90.0 - 110	126395971
Silver, Total	0.052	0.05	mg/L	104	90.0 - 110	126396011
Silver, Total	0.0526	0.05	mg/L	105	90.0 - 110	126396017
Silver, Total	0.0528	0.05	mg/L	106	90.0 - 110	126396066
Silver, Total	0.0523	0.05	mg/L	105	90.0 - 110	126396077
Thallium, Total	0.0499	0.05	mg/L	99.8	90.0 - 110	126395959
Thallium, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126395966
Thallium, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126395971
Thallium, Total	0.0477	0.05	mg/L	95.4	90.0 - 110	126396005
Thallium, Total	0.0481	0.05	mg/L	96.2	90.0 - 110	126396011
Thallium, Total	0.048	0.05	mg/L	96.0	90.0 - 110	126396017
Thallium, Total	0.0488	0.05	mg/L	97.6	90.0 - 110	126396024
Zinc, Total	0.0509	0.05	mg/L	102	90.0 - 110	126395959
Zinc, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126395966
Zinc, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126395971
Zinc, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126396005
Zinc, Total	0.0481	0.05	mg/L	96.2	90.0 - 110	126396011
Zinc, Total	0.0481	0.05	mg/L	96.2	90.0 - 110	126396017
Zinc, Total	0.050	0.05	mg/L	100	90.0 - 110	126396034
Zinc, Total	0.0495	0.05	mg/L	99.0	90.0 - 110	126396045
Zinc, Total	0.0502	0.05	mg/L	100	90.0 - 110	126396066
Zinc, Total	0.0482	0.05	mg/L	96.4	90.0 - 110	126396077
Zinc, Total	0.0499	0.05	mg/L	99.8	90.0 - 110	126396083

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Aluminum, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126395953
Arsenic, Total	0.050	0.05	mg/L	100	90.0 - 110	126395953

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SPAC-R

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Project
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ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Barium, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126395953
Beryllium, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126395953
Cadmium, Total	0.050	0.05	mg/L	100	90.0 - 110	126395953
Chromium, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126395953
Copper, Total	0.0501	0.05	mg/L	100	90.0 - 110	126395953
Lead, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126395953
Nickel, Total	0.0501	0.05	mg/L	100	90.0 - 110	126395953
Silver, Total	0.0542	0.05	mg/L	108	90.0 - 110	126395953
Thallium, Total	0.0501	0.05	mg/L	100	90.0 - 110	126395953
Zinc, Total	0.0508	0.05	mg/L	102	90.0 - 110	126395953

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Aluminum, Total	1121672	0.512	0.505	0.500	85.0 - 115	102	101	mg/L	1.38	20.0
Arsenic, Total	1121672	0.501	0.493	0.500	85.0 - 115	100	98.6	mg/L	1.61	20.0
Barium, Total	1121672	0.504	0.502	0.500	85.0 - 115	101	100	mg/L	0.398	20.0
Beryllium, Total	1121672	0.206	0.208	0.200	85.0 - 115	103	104	mg/L	0.966	20.0
Cadmium, Total	1121672	0.257	0.255	0.250	85.0 - 115	103	102	mg/L	0.781	20.0
Chromium, Total	1121672	0.495	0.489	0.500	85.0 - 115	99.0	97.8	mg/L	1.22	20.0
Copper, Total	1121672	0.506	0.502	0.500	85.0 - 115	101	100	mg/L	0.794	20.0
Lead, Total	1121672	0.518	0.517	0.500	85.0 - 115	104	103	mg/L	0.193	20.0
Nickel, Total	1121672	0.505	0.504	0.500	85.0 - 115	101	101	mg/L	0.198	20.0
Silver, Total	1121672	0.107	0.108	0.100	85.0 - 115	107	108	mg/L	0.930	20.0
Thallium, Total	1121672	0.518	0.516	0.500	85.0 - 115	104	103	mg/L	0.387	20.0
Zinc, Total	1121672	0.512	0.510	0.500	85.0 - 115	102	102	mg/L	0.391	20.0

LDR

Parameter	Reading	Known	Units	Recover%	Limits%	File
Aluminum, Total	10.4	10	mg/L	104	90.0 - 110	126395955
Arsenic, Total	9.64	10	mg/L	96.4	90.0 - 110	126395955
Barium, Total	9.52	10	mg/L	95.2	90.0 - 110	126395955
Beryllium, Total	10.3	10	mg/L	103	90.0 - 110	126395955
Cadmium, Total	9.71	10	mg/L	97.1	90.0 - 110	126395955
Chromium, Total	9.65	10	mg/L	96.5	90.0 - 110	126395955
Copper, Total	9.33	10	mg/L	93.3	90.0 - 110	126395955
Lead, Total	10.2	10	mg/L	102	90.0 - 110	126395955
Manganese, Total	9.53	10	mg/L	95.3	90.0 - 110	126395955
Nickel, Total	9.56	10	mg/L	95.6	90.0 - 110	126395955
Thallium, Total	10.2	10	mg/L	102	90.0 - 110	126395955
Zinc, Total	9.64	10	mg/L	96.4	90.0 - 110	126395955

MRL Check

Parameter	Reading	Known	Units	Recover%	Limits%	File
Copper, Total	0.00102	0.001	mg/L	102	25.0 - 175	126395954
Lead, Total	0.000616	0.001	mg/L	61.6	25.0 - 175	126395954

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SPAC-R

SPACEX
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Project
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MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Arsenic, Total	2303140	0.508	0.502	0.00457	0.500	70.0 - 130	101	99.5	mg/L	1.20	20.0
Beryllium, Total	2303140	0.212	0.209	ND	0.200	70.0 - 130	106	104	mg/L	1.43	20.0
Chromium, Total	2303140	0.488	0.500	0.00079	0.500	70.0 - 130	97.4	99.8	mg/L	2.43	20.0
Lead, Total	2303140	0.521	0.514	0.000346	0.500	70.0 - 130	104	103	mg/L	1.35	20.0
Nickel, Total	2303140	0.505	0.496	0.0021	0.500	70.0 - 130	101	98.8	mg/L	1.81	20.0
Silver, Total	2303140	0.108	0.106	ND	0.100	70.0 - 130	108	106	mg/L	1.87	20.0
Zinc, Total	2303140	0.526	0.521	0.0197	0.500	70.0 - 130	101	100	mg/L	0.992	20.0
Aluminum, Total	2303221	0.529	0.552	0.0225	0.500	70.0 - 130	101	106	mg/L	4.44	20.0
Barium, Total	2303221	0.502	0.508	0.00469	0.500	70.0 - 130	99.5	101	mg/L	1.20	20.0
Cadmium, Total	2303221	0.252	0.252	0.000148	0.250	70.0 - 130	101	101	mg/L	0	20.0
Copper, Total	2303221	0.506	0.515	0.0092	0.500	70.0 - 130	99.4	101	mg/L	1.80	20.0

Analytical Set

1122039

EPA 200.8 5.4

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Thallium, Total	2303221	0.524	0.522	0.000329	0.500	81.1 - 109	105	104	mg/L	0.383	20.0

Analytical Set

1122326

SM 5310 C-2014

AWRL/LOQ C

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon	2.15	2.00	mg/L	108	50.0 - 150	126402004

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Organic Carbon	1122326	0.136	0.0618	0.500	mg/L	126402003

CCB

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Organic Carbon	1122326	0.0999	0.0618	0.500	mg/L	126401997
Total Organic Carbon	1122326	0.154	0.0618	0.500	mg/L	126402015

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon	10.2	10.0	mg/L	102	90.0 - 110	126402000
Total Organic Carbon	10.3	10.0	mg/L	103	90.0 - 110	126402016

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon	20.3	20.0	mg/L	102	90.0 - 110	126401999

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon	10.3	10.0	mg/L	103	90.0 - 110	126402001

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File
Total Organic Carbon	1122326	5.05	5.00	mg/L	101	85.0 - 115	126402002

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MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Total Organic Carbon	2302870	10.4	10.4	0.865	10.0	85.0 - 115	95.4	95.4	mg/L	0	20.0

Standard

<u>Parameter</u>	<u>Sample</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Total Organic Carbon		49.1	50.0	mg/L	98.2	90.0 - 110	126401998

Analytical Set 1122450

EPA 200.8 5.4

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MDL</u>	<u>Units</u>	<u>File</u>
Selenium, Total	1121672	0.000873	0.000728	0.002	mg/L	126408062

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Selenium, Total	0.0501	0.05	mg/L	100	90.0 - 110	126407962
Selenium, Total	0.0503	0.05	mg/L	101	90.0 - 110	126407972
Selenium, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126407982
Selenium, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126407989
Selenium, Total	0.0501	0.05	mg/L	100	90.0 - 110	126408000
Selenium, Total	0.047	0.05	mg/L	94.0	90.0 - 110	126408005
Selenium, Total	0.0481	0.05	mg/L	96.2	90.0 - 110	126408012
Selenium, Total	0.050	0.05	mg/L	100	90.0 - 110	126408013
Selenium, Total	0.0507	0.05	mg/L	101	90.0 - 110	126408022
Selenium, Total	0.0501	0.05	mg/L	100	90.0 - 110	126408061
Selenium, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126408066
Selenium, Total	0.0516	0.05	mg/L	103	90.0 - 110	126408072

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Selenium, Total	0.0502	0.05	mg/L	100	90.0 - 110	126407941

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Selenium, Total	1121672	0.494	0.494	0.500	85.0 - 115	98.8	98.8	mg/L	0	20.0

MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Selenium, Total	2303221	0.484	0.481	0.00162	0.500	70.0 - 130	96.5	95.9	mg/L	0.624	20.0

Analytical Set 1122575

SM 3500-Cr B-2011

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MDL</u>	<u>Units</u>	<u>File</u>
Hexavalent Chromium	1122575	ND	0.550	3.00	ug/L	126411861
Hexavalent Chromium	1122575	ND	0.550	3.00	ug/L	126411873

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Hexavalent Chromium	85.2	80.0	ug/L	106	90.0 - 110	126411862

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CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Hexavalent Chromium	85.4	80.0	ug/L	107	90.0 - 110	126411874

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Hexavalent Chromium	1122575	85.4	86.2	80.0	85.0 - 115	107	108	ug/L	0.932	15.0

MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Hexavalent Chromium	2304236	68.6	67.6	ND	80.0	70.0 - 130	85.8	84.5	ug/L	1.47	20.0

Analytical Set

1123260

EPA 200.8 5.4

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Antimony, Total	1121672	ND	0.000847	0.003	mg/L	126429301

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Antimony, Total	0.0525	0.05	mg/L	105	90.0 - 110	126429267
Antimony, Total	0.0537	0.05	mg/L	107	90.0 - 110	126429277
Antimony, Total	0.0533	0.05	mg/L	107	90.0 - 110	126429287
Antimony, Total	0.053	0.05	mg/L	106	90.0 - 110	126429295
Antimony, Total	0.0539	0.05	mg/L	108	90.0 - 110	126429305
Antimony, Total	0.0549	0.05	mg/L	110	90.0 - 110	126429311
Antimony, Total	0.0549	0.05	mg/L	110	90.0 - 110	126429321
Antimony, Total	0.0541	0.05	mg/L	108	90.0 - 110	126429331

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Antimony, Total	0.050	0.05	mg/L	100	90.0 - 110	126429237

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Antimony, Total	1121672	0.516	0.514	0.500	85.0 - 115	103	103	mg/L	0.388	20.0

MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Antimony, Total	2303221	0.511	0.517	ND	0.500	70.0 - 130	102	103	mg/L	1.17	20.0

Analytical Set

1123498

EPA 200.7 4.4

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Calcium	1121672	ND	0.0156	0.500	mg/L	126434927
Iron, Total	1121672	ND	0.00379	0.025	mg/L	126434927

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Calcium	25.3	25.0	mg/L	101	90.0 - 110	126434920

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Calcium	25.1	25.0	mg/L	100	90.0 - 110	126434930
Calcium	24.9	25.0	mg/L	99.6	90.0 - 110	126434936
Iron, Total	2.48	2.50	mg/L	99.2	90.0 - 110	126434920
Iron, Total	2.46	2.50	mg/L	98.4	90.0 - 110	126434930
Iron, Total	2.45	2.50	mg/L	98.0	90.0 - 110	126434936

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	File
Calcium	49.7	50.0	mg/L	99.4	95.0 - 105	126434914
Iron, Total	4.77	5.00	mg/L	95.4	95.0 - 105	126434914

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Calcium	24.8	25.0	mg/L	99.2	90.0 - 110	126434918
Iron, Total	2.46	2.50	mg/L	98.4	90.0 - 110	126434918

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Calcium	1121672	4.91	4.89	5.00	85.0 - 115	98.2	97.8	mg/L	0.408	25.0
Iron, Total	1121672	0.498	0.497	0.500	85.0 - 115	99.6	99.4	mg/L	0.201	25.0

MRL Check

Parameter	Reading	Known	Units	Recover%	Limits%	File
Calcium	0.521	0.500	mg/L	104	25.0 - 175	126434919
Iron, Total	0.0538	0.050	mg/L	108	25.0 - 175	126434919

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Calcium	2303221	6.42	6.55	1.56	5.00	75.0 - 125	97.2	99.8	mg/L	2.64	25.0
Iron, Total	2303221	0.560	0.563	0.080	0.500	75.0 - 125	96.0	96.6	mg/L	0.623	25.0

Analytical Set

1123699

EPA 200.8 5.4

Blank

Parameter	PrepSet	Reading	MDL	MDL	Units	File
Manganese, Total	1121672	ND	0.000168	0.001	mg/L	126440088

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Manganese, Total	0.0529	0.05	mg/L	106	90.0 - 110	126440082
Manganese, Total	0.052	0.05	mg/L	104	90.0 - 110	126440092
Manganese, Total	0.0495	0.05	mg/L	99.0	90.0 - 110	126440119
Manganese, Total	0.050	0.05	mg/L	100	90.0 - 110	126440128
Manganese, Total	0.0535	0.05	mg/L	107	90.0 - 110	126440204
Manganese, Total	0.0508	0.05	mg/L	102	90.0 - 110	126440235
Manganese, Total	0.0516	0.05	mg/L	103	90.0 - 110	126440243
Manganese, Total	0.0538	0.05	mg/L	108	90.0 - 110	126440254

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ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Manganese, Total	0.0544	0.05	mg/L	109	90.0 - 110	126440073

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Manganese, Total	1121672	0.510	0.512	0.500	85.0 - 115	102	102	mg/L	0.391	20.0

MRL Check

Parameter	Reading	Known	Units	Recover%	Limits%	File
Manganese, Total	0.00104	0.001	mg/L	104	25.0 - 175	126440074

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Manganese, Total	2303221	0.504	0.501	0.00211	0.500	70.0 - 130	100	99.8	mg/L	0.600	20.0

Analytical Set

1121678

EPA 624.1

BFB

Parameter	Sample	RefMass	Reading	%	Limits%	File
BFB Mass 173	1121678	174	10	1.5	0 - 2.00	126387047
BFB Mass 174	1121678	95.0	676	60.4	50.0 - 100	126387047
BFB Mass 175	1121678	174	50	7.4	5.00 - 9.00	126387047
BFB Mass 176	1121678	174	648	95.9	95.0 - 101	126387047
BFB Mass 177	1121678	176	44	6.8	5.00 - 9.00	126387047
BFB Mass 50	1121678	95.0	225	20.1	15.0 - 40.0	126387047
BFB Mass 75	1121678	95.0	557	49.8	30.0 - 60.0	126387047
BFB Mass 95	1121678	95.0	1118	100.0	100 - 100	126387047
BFB Mass 96	1121678	95.0	73	6.5	5.00 - 9.00	126387047

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Acrolein	1121678	ND	2.33	4.00	ug/L	126387051
Acrylonitrile	1121678	ND	0.998	1.00	ug/L	126387051

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	1121678	LCS	170700	179900	89970	269900	126387049	1121678
1,4-DichlorobenzeneD4 (ISTD)	1121678	LCS Dup	168300	179900	89970	269900	126387050	1121678
1,4-DichlorobenzeneD4 (ISTD)	1121678	Blank	143200	179900	89970	269900	126387051	1121678
ChlorobenzeneD5 (ISTD)	1121678	LCS	373700	398400	199200	597600	126387049	1121678
ChlorobenzeneD5 (ISTD)	1121678	LCS Dup	381600	398400	199200	597600	126387050	1121678
ChlorobenzeneD5 (ISTD)	1121678	Blank	337200	398400	199200	597600	126387051	1121678
1,4-DichlorobenzeneD4 (ISTD)	2301862	MS	198000	179900	89970	269900	126387053	1121678
1,4-DichlorobenzeneD4 (ISTD)	2301862	MSD	189800	179900	89970	269900	126387054	1121678
ChlorobenzeneD5 (ISTD)	2301862	MS	393500	398400	199200	597600	126387053	1121678
ChlorobenzeneD5 (ISTD)	2301862	MSD	420500	398400	199200	597600	126387054	1121678
1,4-DichlorobenzeneD4 (ISTD)	2302895	Unknown	174400	179900	89970	269900	126387055	1121678
ChlorobenzeneD5 (ISTD)	2302895	Unknown	396500	398400	199200	597600	126387055	1121678

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IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	1121678	LCS	11.97	11.97	11.91	12.03	126387049	1121678
1,4-DichlorobenzeneD4 (ISTD)	1121678	LCS Dup	11.97	11.97	11.91	12.03	126387050	1121678
1,4-DichlorobenzeneD4 (ISTD)	1121678	Blank	11.97	11.97	11.91	12.03	126387051	1121678
ChlorobenzeneD5 (ISTD)	1121678	LCS	9.597	9.597	9.537	9.657	126387049	1121678
ChlorobenzeneD5 (ISTD)	1121678	LCS Dup	9.597	9.597	9.537	9.657	126387050	1121678
ChlorobenzeneD5 (ISTD)	1121678	Blank	9.597	9.597	9.537	9.657	126387051	1121678
1,4-DichlorobenzeneD4 (ISTD)	2301862	MS	11.98	11.97	11.91	12.03	126387053	1121678
1,4-DichlorobenzeneD4 (ISTD)	2301862	MSD	11.98	11.97	11.91	12.03	126387054	1121678
ChlorobenzeneD5 (ISTD)	2301862	MS	9.597	9.597	9.537	9.657	126387053	1121678
ChlorobenzeneD5 (ISTD)	2301862	MSD	9.597	9.597	9.537	9.657	126387054	1121678
1,4-DichlorobenzeneD4 (ISTD)	2302895	Unknown	11.97	11.97	11.91	12.03	126387055	1121678
ChlorobenzeneD5 (ISTD)	2302895	Unknown	9.597	9.597	9.537	9.657	126387055	1121678

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Acrolein	1121678	58.0	55.0	40.0	60.0 - 140	145 *	138	ug/L	4.95	30.0
Acrylonitrile	1121678	34.4	33.8	40.0	60.0 - 140	86.0	84.5	ug/L	1.76	30.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Acrolein	2301862	17.9	34.6	ND	400	40.0 - 160	4.48 *	8.65 *	ug/L	63.6 *	60.0
Acrylonitrile	2301862	19.8	3.00	ND	400	40.0 - 160	4.95 *	0.750 *	ug/L	147 *	60.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
1,2-DCA-d4 (SURR)	1121678	LCS	19.8	20.0	ug/L	99.0	70.0 - 130	126387049
1,2-DCA-d4 (SURR)	1121678	LCS Dup	19.5	20.0	ug/L	97.5	70.0 - 130	126387050
1,2-DCA-d4 (SURR)	1121678	Blank	20.6	20.0	ug/L	103	70.0 - 130	126387051
Bromofluorobenzene (SURR)	1121678	LCS	20.0	20.0	ug/L	100	70.0 - 130	126387049
Bromofluorobenzene (SURR)	1121678	LCS Dup	20.2	20.0	ug/L	101	70.0 - 130	126387050
Bromofluorobenzene (SURR)	1121678	Blank	21.1	20.0	ug/L	106	70.0 - 130	126387051
Dibromofluoromethane (SURR)	1121678	LCS	20.0	20.0	ug/L	100	70.0 - 130	126387049
Dibromofluoromethane (SURR)	1121678	LCS Dup	20.1	20.0	ug/L	100	70.0 - 130	126387050
Dibromofluoromethane (SURR)	1121678	Blank	19.8	20.0	ug/L	99.0	70.0 - 130	126387051
TolueneD8 (SURR)	1121678	LCS	20.1	20.0	ug/L	100	70.0 - 130	126387049
TolueneD8 (SURR)	1121678	LCS Dup	19.7	20.0	ug/L	98.5	70.0 - 130	126387050
TolueneD8 (SURR)	1121678	Blank	20.0	20.0	ug/L	100	70.0 - 130	126387051
1,2-DCA-d4 (SURR)	2301862	MS	19.5	20.0	ug/L	97.5	70.0 - 130	126387053
1,2-DCA-d4 (SURR)	2301862	MSD	19.3	20.0	ug/L	96.5	70.0 - 130	126387054
Bromofluorobenzene (SURR)	2301862	MS	19.8	20.0	ug/L	99.0	70.0 - 130	126387053
Bromofluorobenzene (SURR)	2301862	MSD	20.7	20.0	ug/L	104	70.0 - 130	126387054
Dibromofluoromethane (SURR)	2301862	MS	18.8	20.0	ug/L	94.0	70.0 - 130	126387053
Dibromofluoromethane (SURR)	2301862	MSD	17.8	20.0	ug/L	89.0	70.0 - 130	126387054
TolueneD8 (SURR)	2301862	MS	20.9	20.0	ug/L	104	70.0 - 130	126387053
TolueneD8 (SURR)	2301862	MSD	20.7	20.0	ug/L	104	70.0 - 130	126387054
1,2-DCA-d4 (SURR)	2302895	Unknown	19.8	20.0	ug/L	99.0	70.0 - 130	126387055

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SPAC-R

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Space Exploration Technologies
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Brownsville, TX 78521

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	Surrogate							
<u>Parameter</u>	<u>Sample</u>	<u>Type</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Bromofluorobenzene (SURR)	2302895	Unknown	20.3	20.0	ug/L	102	70.0 - 130	126387055
Dibromofluoromethane (SURR)	2302895	Unknown	20.1	20.0	ug/L	100	70.0 - 130	126387055
TolueneD8 (SURR)	2302895	Unknown	20.2	20.0	ug/L	101	70.0 - 130	126387055

Analytical Set

1121680

EPA 624.1

BFB							
<u>Parameter</u>	<u>Sample</u>	<u>RefMass</u>	<u>Reading</u>	<u>%</u>	<u>Limits%</u>	<u>File</u>	
BFB Mass 173	1121680	174	10	1.5	0 - 2.00	126387066	
BFB Mass 174	1121680	95.0	676	60.4	50.0 - 100	126387066	
BFB Mass 175	1121680	174	50	7.4	5.00 - 9.00	126387066	
BFB Mass 176	1121680	174	648	95.9	95.0 - 101	126387066	
BFB Mass 177	1121680	176	44	6.8	5.00 - 9.00	126387066	
BFB Mass 50	1121680	95.0	225	20.1	15.0 - 40.0	126387066	
BFB Mass 75	1121680	95.0	557	49.8	30.0 - 60.0	126387066	
BFB Mass 95	1121680	95.0	1118	100.0	100 - 100	126387066	
BFB Mass 96	1121680	95.0	73	6.5	5.00 - 9.00	126387066	

Blank							
<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>	
1,1,1-Trichloroethane	1121680	ND	0.531	1.00	ug/L	126387070	
1,1,2-Trichloroethane	1121680	ND	0.563	1.00	ug/L	126387070	
1,1-Dichloroethane	1121680	ND	0.593	1.00	ug/L	126387070	
1,1-Dichloroethylene	1121680	ND	0.574	1.00	ug/L	126387070	
1,2-Dibromoethane (EDB)	1121680	ND	0.562	1.00	ug/L	126387070	
1,2-Dichloroethane	1121680	ND	0.590	1.00	ug/L	126387070	
1,2-Dichloropropane	1121680	ND	0.615	1.00	ug/L	126387070	
Benzene	1121680	ND	0.453	1.00	ug/L	126387070	
Bromodichloromethane	1121680	ND	0.409	1.00	ug/L	126387070	
Bromoform	1121680	ND	0.500	1.00	ug/L	126387070	
Carbon Tetrachloride	1121680	ND	0.299	1.00	ug/L	126387070	
Chlorobenzene	1121680	ND	0.558	1.00	ug/L	126387070	
Chloroethane	1121680	ND	1.12	1.12	ug/L	126387070	
Chloroform	1121680	ND	0.463	1.00	ug/L	126387070	
Chloromethane (Methyl Chloride)	1121680	ND	0.811	1.00	ug/L	126387070	
cis-1,3-Dichloropropene	1121680	ND	0.660	1.00	ug/L	126387070	
Dibromochloromethane	1121680	ND	0.311	1.00	ug/L	126387070	
Dichloromethane	1121680	ND	1.02	1.02	ug/L	126387070	
Ethylbenzene	1121680	ND	0.498	1.00	ug/L	126387070	
m-Dichlorobenzene (1,3-DCB)	1121680	ND	0.619	1.00	ug/L	126387070	
Methyl ethyl ketone (Butanone)	1121680	ND	0.742	1.00	ug/L	126387070	
o-Dichlorobenzene (1,2-DCB)	1121680	0.620	0.532	1.00	ug/L	126387070	
p-Dichlorobenzene (1,4-DCB)	1121680	ND	0.837	1.00	ug/L	126387070	
Tetrachloroethylene	1121680	ND	0.607	1.00	ug/L	126387070	
Toluene	1121680	ND	0.655	1.00	ug/L	126387070	
trans-1,2-Dichloroethylene	1121680	ND	0.701	1.00	ug/L	126387070	

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Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
trans-1,3-Dichloropropene	1121680	ND	0.627	1.00	ug/L	126387070
Trichloroethylene	1121680	ND	0.521	1.00	ug/L	126387070
Vinyl chloride	1121680	ND	0.702	1.00	ug/L	126387070

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	1121680	LCS	170700	179900	89970	269900	126387068	1121680
1,4-DichlorobenzeneD4 (ISTD)	1121680	LCS Dup	168300	179900	89970	269900	126387069	1121680
1,4-DichlorobenzeneD4 (ISTD)	1121680	Blank	143200	179900	89970	269900	126387070	1121680
ChlorobenzeneD5 (ISTD)	1121680	LCS	373700	398400	199200	597600	126387068	1121680
ChlorobenzeneD5 (ISTD)	1121680	LCS Dup	381600	398400	199200	597600	126387069	1121680
ChlorobenzeneD5 (ISTD)	1121680	Blank	337200	398400	199200	597600	126387070	1121680
1,4-DichlorobenzeneD4 (ISTD)	2301862	MS	198000	179900	89970	269900	126387072	1121680
1,4-DichlorobenzeneD4 (ISTD)	2301862	MSD	189800	179900	89970	269900	126387073	1121680
ChlorobenzeneD5 (ISTD)	2301862	MS	393500	398400	199200	597600	126387072	1121680
ChlorobenzeneD5 (ISTD)	2301862	MSD	420500	398400	199200	597600	126387073	1121680
1,4-DichlorobenzeneD4 (ISTD)	2302895	Unknown	192300	179900	89970	269900	126387074	1121680
ChlorobenzeneD5 (ISTD)	2302895	Unknown	439200	398400	199200	597600	126387074	1121680

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	1121680	LCS	11.97	11.97	11.91	12.03	126387068	1121680
1,4-DichlorobenzeneD4 (ISTD)	1121680	LCS Dup	11.97	11.97	11.91	12.03	126387069	1121680
1,4-DichlorobenzeneD4 (ISTD)	1121680	Blank	11.97	11.97	11.91	12.03	126387070	1121680
ChlorobenzeneD5 (ISTD)	1121680	LCS	9.597	9.597	9.537	9.657	126387068	1121680
ChlorobenzeneD5 (ISTD)	1121680	LCS Dup	9.597	9.597	9.537	9.657	126387069	1121680
ChlorobenzeneD5 (ISTD)	1121680	Blank	9.597	9.597	9.537	9.657	126387070	1121680
1,4-DichlorobenzeneD4 (ISTD)	2301862	MS	11.98	11.97	11.91	12.03	126387072	1121680
1,4-DichlorobenzeneD4 (ISTD)	2301862	MSD	11.98	11.97	11.91	12.03	126387073	1121680
ChlorobenzeneD5 (ISTD)	2301862	MS	9.597	9.597	9.537	9.657	126387072	1121680
ChlorobenzeneD5 (ISTD)	2301862	MSD	9.597	9.597	9.537	9.657	126387073	1121680
1,4-DichlorobenzeneD4 (ISTD)	2302895	Unknown	11.97	11.97	11.91	12.03	126387074	1121680
ChlorobenzeneD5 (ISTD)	2302895	Unknown	9.597	9.597	9.537	9.657	126387074	1121680

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,1,1-Trichloroethane	1121680	17.0	16.2	20.0	70.0 - 130	85.0	81.0	ug/L	4.82	21.0
1,1,2,2-Tetrachloroethane	1121680	18.3	17.9	20.0	60.0 - 140	91.5	89.5	ug/L	2.21	36.0
1,1,2-Trichloroethane	1121680	18.2	17.6	20.0	70.0 - 130	91.0	88.0	ug/L	3.35	27.0
1,1-Dichloroethane	1121680	17.6	16.6	20.0	70.0 - 130	88.0	83.0	ug/L	5.85	24.0
1,1-Dichloroethylene	1121680	17.1	16.2	20.0	50.0 - 150	85.5	81.0	ug/L	5.41	40.0
1,2-Dibromoethane (EDB)	1121680	18.4	17.5	20.0	78.4 - 122	92.0	87.5	ug/L	5.01	30.0
1,2-Dichloroethane	1121680	17.9	17.2	20.0	70.0 - 130	89.5	86.0	ug/L	3.99	29.0
1,2-Dichloropropane	1121680	18.0	17.2	20.0	35.0 - 165	90.0	86.0	ug/L	4.55	69.0
Benzene	1121680	17.1	16.4	20.0	65.0 - 135	85.5	82.0	ug/L	4.18	33.0
Bromodichloromethane	1121680	18.2	17.2	20.0	65.0 - 135	91.0	86.0	ug/L	5.65	34.0

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LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Bromoform	1121680	17.4	17.0	20.0	70.0 - 130	87.0	85.0	ug/L	2.33	25.0
Bromomethane (Methyl Bromi	1121680	13.7	13.8	20.0	15.0 - 185	68.5	69.0	ug/L	0.727	90.0
Carbon Tetrachloride	1121680	17.6	16.9	20.0	70.0 - 130	88.0	84.5	ug/L	4.06	26.0
Chlorobenzene	1121680	18.0	17.2	20.0	65.0 - 135	90.0	86.0	ug/L	4.55	29.0
Chloroethane	1121680	15.2	15.0	20.0	40.0 - 160	76.0	75.0	ug/L	1.32	47.0
Chloroform	1121680	17.6	16.3	20.0	70.0 - 135	88.0	81.5	ug/L	7.67	32.0
Chloromethane (Methyl Chloride)	1121680	12.7	12.1	20.0	0.100 - 205	63.5	60.5	ug/L	4.84	472
cis-1,3-Dichloropropene	1121680	16.8	16.1	20.0	25.0 - 175	84.0	80.5	ug/L	4.26	79.0
Dibromochloromethane	1121680	18.5	17.6	20.0	70.0 - 135	92.5	88.0	ug/L	4.99	30.0
Dichloromethane	1121680	16.9	16.1	20.0	60.0 - 140	84.5	80.5	ug/L	4.85	192
Ethylbenzene	1121680	19.1	18.2	20.0	60.0 - 140	95.5	91.0	ug/L	4.83	34.0
m-Dichlorobenzene (1,3-DCB)	1121680	20.0	20.2	20.0	70.0 - 130	100	101	ug/L	0.995	24.0
Methyl ethyl ketone (Butanone)	1121680	18.6	16.8	20.0	62.3 - 136	93.0	84.0	ug/L	10.2	30.0
o-Dichlorobenzene (1,2-DCB)	1121680	18.9	18.4	20.0	65.0 - 135	94.5	92.0	ug/L	2.68	31.0
p-Dichlorobenzene (1,4-DCB)	1121680	18.7	18.7	20.0	65.0 - 135	93.5	93.5	ug/L	0	31.0
Tetrachloroethylene	1121680	19.0	18.4	20.0	70.0 - 130	95.0	92.0	ug/L	3.21	23.0
Toluene	1121680	17.3	16.5	20.0	70.0 - 130	86.5	82.5	ug/L	4.73	22.0
trans-1,2-Dichloroethylene	1121680	16.5	15.7	20.0	70.0 - 130	82.5	78.5	ug/L	4.97	27.0
trans-1,3-Dichloropropene	1121680	17.6	16.5	20.0	50.0 - 150	88.0	82.5	ug/L	6.45	52.0
Trichloroethylene	1121680	17.0	16.3	20.0	65.0 - 135	85.0	81.5	ug/L	4.20	29.0
Vinyl chloride	1121680	14.1	13.5	20.0	5.00 - 195	70.5	67.5	ug/L	4.35	100

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
1,1,1-Trichloroethane	2301862	169	162	ND	200	52.0 - 162	84.5	81.0	ug/L	4.23	36.0
1,1,2,2-Tetrachloroethane	2301862	0	3.90	ND	200	70.0 - 130	*	1.95 *	ug/L		30.0
1,1,2-Trichloroethane	2301862	174	169	ND	200	52.0 - 150	87.0	84.5	ug/L	2.92	45.0
1,1-Dichloroethane	2301862	194	181	ND	200	59.0 - 155	97.0	90.5	ug/L	6.93	40.0
1,1-Dichloroethylene	2301862	182	173	ND	200	0.100 - 234	91.0	86.5	ug/L	5.07	32.0
1,2-Dibromoethane (EDB)	2301862	176	175	ND	200	49.3 - 120	88.0	87.5	ug/L	0.570	30.0
1,2-Dichloroethane	2301862	171	162	ND	200	49.0 - 155	85.5	81.0	ug/L	5.41	49.0
1,2-Dichloropropane	2301862	182	179	ND	200	0.100 - 210	91.0	89.5	ug/L	1.66	55.0
Benzene	2301862	183	171	ND	200	37.0 - 151	91.5	85.5	ug/L	6.78	61.0
Bromodichloromethane	2301862	166	163	ND	200	35.0 - 155	83.0	81.5	ug/L	1.82	56.0
Bromoform	2301862	87.1	91.9	ND	200	45.0 - 169	43.6 *	46.0	ug/L	5.36	42.0
Bromomethane (Methyl Bromi	2301862	117	113	ND	200	0.100 - 242	58.5	56.5	ug/L	3.48	61.0
Carbon Tetrachloride	2301862	161	147	ND	200	70.0 - 140	80.5	73.5	ug/L	9.09	41.0
Chlorobenzene	2301862	184	181	ND	200	37.0 - 160	92.0	90.5	ug/L	1.64	53.0
Chloroethane	2301862	160	150	ND	200	14.0 - 230	80.0	75.0	ug/L	6.45	78.0
Chloroform	2301862	184	168	ND	200	51.0 - 138	92.0	84.0	ug/L	9.09	54.0
Chloromethane (Methyl Chloride)	2301862	135	132	ND	200	0.100 - 273	67.5	66.0	ug/L	2.25	60.0
cis-1,3-Dichloropropene	2301862	168	165	ND	200	0.100 - 227	84.0	82.5	ug/L	1.80	58.0
Dibromochloromethane	2301862	161	160	ND	200	53.0 - 149	80.5	80.0	ug/L	0.623	50.0
Dichloromethane	2301862	170	164	ND	200	0.100 - 221	85.0	82.0	ug/L	3.59	28.0
Ethylbenzene	2301862	203	200	ND	200	37.0 - 162	102	100	ug/L	1.49	63.0

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MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
m-Dichlorobenzene (1,3-DCB)	2301862	216	227	ND	200	59.0 - 156	108	114	ug/L	4.97	43.0
Methyl ethyl ketone (Butanone)	2301862	0	0	ND	200	0.100 - 211	0 *	0 *	ug/L		30.0
o-Dichlorobenzene (1,2-DCB)	2301862	177	185	ND	200	18.0 - 190	88.5	92.5	ug/L	4.42	57.0
p-Dichlorobenzene (1,4-DCB)	2301862	191	217	ND	200	18.0 - 190	95.5	108	ug/L	12.7	57.0
Tetrachloroethylene	2301862	206	205	ND	200	64.0 - 148	103	102	ug/L	0.487	39.0
Toluene	2301862	182	176	ND	200	47.0 - 150	91.0	88.0	ug/L	3.35	41.0
trans-1,2-Dichloroethylene	2301862	166	154	ND	200	54.0 - 156	83.0	77.0	ug/L	7.50	45.0
trans-1,3-Dichloropropene	2301862	172	173	ND	200	17.0 - 183	86.0	86.5	ug/L	0.580	86.0
Trichloroethylene	2301862	348	342	ND	200	70.0 - 157	174 *	171 *	ug/L	1.74	48.0
Vinyl chloride	2301862	144	137	ND	200	0.100 - 251	72.0	68.5	ug/L	4.98	66.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
1,2-DCA-d4 (SURR)	1121680	LCS	19.8	20.0	ug/L	99.0	70.0 - 130	126387068
1,2-DCA-d4 (SURR)	1121680	LCS Dup	19.5	20.0	ug/L	97.5	70.0 - 130	126387069
1,2-DCA-d4 (SURR)	1121680	Blank	20.6	20.0	ug/L	103	70.0 - 130	126387070
Bromofluorobenzene (SURR)	1121680	LCS	20.0	20.0	ug/L	100	70.0 - 130	126387068
Bromofluorobenzene (SURR)	1121680	LCS Dup	20.2	20.0	ug/L	101	70.0 - 130	126387069
Bromofluorobenzene (SURR)	1121680	Blank	21.1	20.0	ug/L	106	70.0 - 130	126387070
Dibromofluoromethane (SURR)	1121680	LCS	20.0	20.0	ug/L	100	70.0 - 130	126387068
Dibromofluoromethane (SURR)	1121680	LCS Dup	20.1	20.0	ug/L	100	70.0 - 130	126387069
Dibromofluoromethane (SURR)	1121680	Blank	19.8	20.0	ug/L	99.0	70.0 - 130	126387070
TolueneD8 (SURR)	1121680	LCS	20.1	20.0	ug/L	100	70.0 - 130	126387068
TolueneD8 (SURR)	1121680	LCS Dup	19.7	20.0	ug/L	98.5	70.0 - 130	126387069
TolueneD8 (SURR)	1121680	Blank	20.0	20.0	ug/L	100	70.0 - 130	126387070
1,2-DCA-d4 (SURR)	2301862	MS	19.5	20.0	ug/L	97.5	70.0 - 130	126387072
1,2-DCA-d4 (SURR)	2301862	MSD	19.3	20.0	ug/L	96.5	70.0 - 130	126387073
Bromofluorobenzene (SURR)	2301862	MS	19.8	20.0	ug/L	99.0	70.0 - 130	126387072
Bromofluorobenzene (SURR)	2301862	MSD	20.7	20.0	ug/L	104	70.0 - 130	126387073
Dibromofluoromethane (SURR)	2301862	MS	18.8	20.0	ug/L	94.0	70.0 - 130	126387072
Dibromofluoromethane (SURR)	2301862	MSD	17.8	20.0	ug/L	89.0	70.0 - 130	126387073
TolueneD8 (SURR)	2301862	MS	20.9	20.0	ug/L	104	70.0 - 130	126387072
TolueneD8 (SURR)	2301862	MSD	20.7	20.0	ug/L	104	70.0 - 130	126387073
1,2-DCA-d4 (SURR)	2302895	Unknown	20.5	20.0	ug/L	102	70.0 - 130	126387074
Bromofluorobenzene (SURR)	2302895	Unknown	20.6	20.0	ug/L	103	70.0 - 130	126387074
Dibromofluoromethane (SURR)	2302895	Unknown	20.2	20.0	ug/L	101	70.0 - 130	126387074
TolueneD8 (SURR)	2302895	Unknown	20.2	20.0	ug/L	101	70.0 - 130	126387074

Analytical Set

1122623

EPA 608.3

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Parameter	PrepSet	Reading	MDL	MDL	Units	File
PCB-1016	1121972	ND	0.202	0.202	ug/L	126412989
PCB-1221	1121972	ND	0.143	0.200	ug/L	126412989
PCB-1232	1121972	ND	0.143	0.200	ug/L	126412989
PCB-1242	1121972	ND	0.192	0.200	ug/L	126412989

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SPAC-R

SPACEX
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Parameter	PrepSet	Reading	MDL	MQL	Units	File
PCB-1248	1121972	ND	0.143	0.200	ug/L	126412989
PCB-1254	1121972	ND	0.143	0.200	ug/L	126412989
PCB-1260	1121972	ND	0.161	0.200	ug/L	126412989
PCB-1262	1121972	ND	0.198	0.200	ug/L	126412989
PCB-1268	1121972	ND	0.143	0.200	ug/L	126412989

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
PCB-1016	968	1000	ug/L	96.8	80.0 - 115	126412978
PCB-1016	1140	1000	ug/L	114	80.0 - 115	126412988
PCB-1016	1170	1000	ug/L	117	80.0 - 115 *	126412997
PCB-1016	1170	1000	ug/L	117	80.0 - 115 *	126412998
PCB-1260	853	1000	ug/L	85.3	80.0 - 115	126412978
PCB-1260	939	1000	ug/L	93.9	80.0 - 115	126412988
PCB-1260	1010	1000	ug/L	101	80.0 - 115	126412997
PCB-1260	987	1000	ug/L	98.7	80.0 - 115	126412998

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
PCB-1016	1121972	941	859	1000	39.8 - 135	94.1	85.9	ug/L	9.11	30.0
PCB-1260	1121972	728	711	1000	36.1 - 134	72.8	71.1	ug/L	2.36	30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
Decachlorobiphenyl	1121972	Blank	55.6	100	ug/L	55.6	10.0 - 200	126412989
Tetrachloro-m-Xylene (Surr)	1121972	Blank	46.2	100	ug/L	46.2	10.0 - 200	126412989
Decachlorobiphenyl	2302895	Unknown	1.26	1.65	ug/L	76.4	10.0 - 200	126412995
Tetrachloro-m-Xylene (Surr)	2302895	Unknown	0.697	1.65	ug/L	42.2	10.0 - 200	126412995

Analytical Set

1122871

ASTM D7065-11

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Parameter	PrepSet	Reading	MDL	MQL	Units	File
Nonylphenol	1122298	ND	5.00	30.0	ug/L	126419398

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Nonylphenol	293000	300000	ug/L	97.5	70.0 - 130	126419397
Nonylphenol	299000	300000	ug/L	99.7	70.0 - 130	126419405

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
Acenaphthene-d10-ISTD	624841	CCV	760100	760100	380100	1140000	126419397	624841
Acenaphthene-d10-ISTD	624841	CCV	706900	760100	380100	1140000	126419405	624841
Phenanthrene-d10-ISTD	624841	CCV	981000	981000	490500	1471000	126419397	624841
Phenanthrene-d10-ISTD	624841	CCV	925500	981000	490500	1471000	126419405	624841
Acenaphthene-d10-ISTD	1122298	Blank	681400	760100	380100	1140000	126419398	1122298

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IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
Acenaphthene-d10-ISTD	1122298	LCS	663100	760100	380100	1140000	126419399	1122298
Acenaphthene-d10-ISTD	1122298	LCS Dup	581500	760100	380100	1140000	126419400	1122298
Phenanthrene-d10-ISTD	1122298	Blank	930700	981000	490500	1471000	126419398	1122298
Phenanthrene-d10-ISTD	1122298	LCS	890000	981000	490500	1471000	126419399	1122298
Phenanthrene-d10-ISTD	1122298	LCS Dup	773800	981000	490500	1471000	126419400	1122298
Acenaphthene-d10-ISTD	2302895	Unknown	536500	760100	380100	1140000	126419403	1122298
Phenanthrene-d10-ISTD	2302895	Unknown	747500	981000	490500	1471000	126419403	1122298

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
Acenaphthene-d10-ISTD	624841	CCV	7.294	7.294	7.234	7.354	126419397	624841
Acenaphthene-d10-ISTD	624841	CCV	7.294	7.294	7.234	7.354	126419405	624841
Phenanthrene-d10-ISTD	624841	CCV	8.538	8.538	8.478	8.598	126419397	624841
Phenanthrene-d10-ISTD	624841	CCV	8.538	8.538	8.478	8.598	126419405	624841
Acenaphthene-d10-ISTD	1122298	Blank	7.294	7.294	7.234	7.354	126419398	1122298
Acenaphthene-d10-ISTD	1122298	LCS	7.300	7.294	7.234	7.354	126419399	1122298
Acenaphthene-d10-ISTD	1122298	LCS Dup	7.300	7.294	7.234	7.354	126419400	1122298
Phenanthrene-d10-ISTD	1122298	Blank	8.532	8.538	8.478	8.598	126419398	1122298
Phenanthrene-d10-ISTD	1122298	LCS	8.538	8.538	8.478	8.598	126419399	1122298
Phenanthrene-d10-ISTD	1122298	LCS Dup	8.538	8.538	8.478	8.598	126419400	1122298
Acenaphthene-d10-ISTD	2302895	Unknown	7.294	7.294	7.234	7.354	126419403	1122298
Phenanthrene-d10-ISTD	2302895	Unknown	8.532	8.538	8.478	8.598	126419403	1122298

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Nonylphenol	1122298	124	127	150	56.0 - 112	82.7	84.7	ug/L	2.39	30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
4-Nonylphenol-SURR	624841	CCV	49000	50000	ug/L	98.0	50.0 - 130	126419397
4-Nonylphenol-SURR	624841	CCV	50600	50000	ug/L	101	50.0 - 130	126419405
4-Nonylphenol-SURR	1122298	Blank	21600	25000	ug/L	86.4	50.0 - 130	126419398
4-Nonylphenol-SURR	1122298	LCS	22400	25000	ug/L	89.6	50.0 - 130	126419399
4-Nonylphenol-SURR	1122298	LCS Dup	23800	25000	ug/L	95.2	50.0 - 130	126419400
4-Nonylphenol-SURR	2302895	Unknown	24.8	28.0	ug/L	88.6	50.0 - 130	126419403

Analytical Set

1124511

EPA 625.1

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Parameter	PrepSet	Reading	MDL	MQL	Units	File
1,2,4,5-Tetrachlorobenzene	1121954	ND	1.03	1.03	ug/L	126461237
1,2,4-Trichlorobenzene	1121954	ND	0.941	1.00	ug/L	126461237
1,2-Dichlorobenzene	1121954	ND	1.04	5.00	ug/L	126461237
1,2-DPH (as azobenzene)	1121954	ND	0.238	1.00	ug/L	126461237
1,3-Dichlorobenzene	1121954	ND	0.954	5.00	ug/L	126461237
1,4-Dichlorobenzene	1121954	ND	1.01	5.00	ug/L	126461237
2,4,5-Trichlorophenol	1121954	ND	0.961	5.00	ug/L	126461237

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<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
2,4,6-Trichlorophenol	1121954	ND	1.24	2.00	ug/L	126461237
2,4-Dichlorophenol	1121954	ND	0.222	1.00	ug/L	126461237
2,4-Dimethylphenol	1121954	ND	0.536	1.00	ug/L	126461237
2,4-Dinitrophenol	1121954	ND	1.34	2.00	ug/L	126461237
2,4-Dinitrotoluene	1121954	ND	1.35	2.00	ug/L	126461237
2,6-Dinitrotoluene	1121954	ND	1.29	2.00	ug/L	126461237
2-Chloronaphthalene	1121954	ND	0.150	1.00	ug/L	126461237
2-Chlorophenol	1121954	ND	0.275	1.00	ug/L	126461237
2-Methylphenol (o-Cresol)	1121954	ND	8.48	10.0	ug/L	126461237
2-Nitrophenol	1121954	ND	0.554	1.00	ug/L	126461237
3&4-Methylphenol (m&p-Cresol)	1121954	ND	7.78	8.00	ug/L	126461237
3,3'-Dichlorobenzidine	1121954	ND	1.39	2.00	ug/L	126461237
4,6-Dinitro-2-methylphenol	1121954	ND	1.15	2.00	ug/L	126461237
4-Bromophenyl phenyl ether	1121954	ND	0.772	1.00	ug/L	126461237
4-Chlorophenyl phenyl ethe	1121954	ND	0.202	1.00	ug/L	126461237
4-Nitrophenol	1121954	ND	0.789	1.00	ug/L	126461237
Acenaphthene	1121954	ND	0.177	1.00	ug/L	126461237
Acenaphthylene	1121954	ND	0.240	1.00	ug/L	126461237
Aniline	1121954	ND	2470	2470	ug/L	126461237
Anthracene	1121954	ND	0.241	1.00	ug/L	126461237
Benzidine	1121954	ND	1.40	1.50	ug/L	126461237
Benzo(a)anthracene	1121954	ND	0.225	1.00	ug/L	126461237
Benzo(a)pyrene	1121954	ND	0.900	1.00	ug/L	126461237
Benzo(b)fluoranthene	1121954	ND	0.547	1.00	ug/L	126461237
Benzo(ghi)perylene	1121954	ND	0.881	1.00	ug/L	126461237
Benzo(k)fluoranthene	1121954	ND	0.252	1.00	ug/L	126461237
Benzyl Butyl phthalate	1121954	0.370	0.204	7.50	ug/L	126461237
Bis(2-chloroethoxy)methane	1121954	ND	0.277	1.00	ug/L	126461237
Bis(2-chloroethyl)ether	1121954	ND	0.348	1.00	ug/L	126461237
Bis(2-chloroisopropyl)ether	1121954	ND	0.738	1.00	ug/L	126461237
Bis(2-ethylhexyl)phthalate	1121954	ND	1.12	7.50	ug/L	126461237
Chrysene (Benzo(a)phenanthrene)	1121954	ND	0.289	1.00	ug/L	126461237
Dibenz(a,h)anthracene	1121954	ND	0.689	1.00	ug/L	126461237
Diethyl phthalate	1121954	ND	0.253	5.70	ug/L	126461237
Dimethyl phthalate	1121954	ND	0.540	4.80	ug/L	126461237
Di-n-butylphthalate	1121954	ND	0.978	7.50	ug/L	126461237
Di-n-octylphthalate	1121954	ND	1.92	2.00	ug/L	126461237
Fluoranthene(Benzo(j,k)fluorene)	1121954	ND	0.318	1.00	ug/L	126461237
Fluorene	1121954	ND	0.275	1.00	ug/L	126461237
Hexachlorobenzene	1121954	ND	0.871	1.00	ug/L	126461237
Hexachlorobutadiene	1121954	ND	1.03	1.03	ug/L	126461237
Hexachlorocyclopentadiene	1121954	ND	0.536	1.00	ug/L	126461237
Hexachloroethane	1121954	ND	1.05	2.00	ug/L	126461237
Indeno(1,2,3-cd)pyrene	1121954	ND	0.596	1.00	ug/L	126461237
Isophorone	1121954	ND	0.429	1.00	ug/L	126461237

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SPAC-R

SPACE X
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<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Naphthalene	1121954	ND	0.225	1.00	ug/L	126461237
Nitrobenzene	1121954	ND	0.271	1.00	ug/L	126461237
n-Nitrosodiethylamine	1121954	ND	0.747	1.00	ug/L	126461237
N-Nitrosodimethylamine	1121954	ND	0.542	1.00	ug/L	126461237
n-Nitroso-di-n-butylamine	1121954	ND	0.210	1.00	ug/L	126461237
N-Nitrosodi-n-propylamine	1121954	ND	0.425	1.00	ug/L	126461237
N-Nitrosodiphenylamine (as DPA)	1121954	ND	0.404	1.00	ug/L	126461237
p-Chloro-m-Cresol (4-Chloro-3-me	1121954	ND	0.588	1.00	ug/L	126461237
Pentachlorobenzene	1121954	ND	0.977	1.00	ug/L	126461237
Pentachlorophenol	1121954	ND	0.960	5.00	ug/L	126461237
Phenanthrene	1121954	ND	0.269	1.00	ug/L	126461237
Phenol	1121954	ND	0.332	1.00	ug/L	126461237
Pyrene	1121954	ND	0.291	1.00	ug/L	126461237
Pyridine	1121954	ND	1.35	1.35	ug/L	126461237

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
1,2,4,5-Tetrachlorobenzene	48200	50000	ug/L	96.4	60.0 - 140	126461236
1,2,4-Trichlorobenzene	48600	50000	ug/L	97.2	61.0 - 130	126461236
1,2-Dichlorobenzene	47800	50000	ug/L	95.6	60.0 - 140	126461236
1,2-DPH (as azobenzene)	53400	50000	ug/L	107	60.0 - 140	126461236
1,3-Dichlorobenzene	43700	50000	ug/L	87.4	60.0 - 140	126461236
1,4-Dichlorobenzene	42500	50000	ug/L	85.0	60.0 - 140	126461236
2,4,5-Trichlorophenol	49400	50000	ug/L	98.8	69.0 - 130	126461236
2,4,6-Trichlorophenol	46000	50000	ug/L	92.0	69.0 - 130	126461236
2,4-Dichlorophenol	44700	50000	ug/L	89.4	64.0 - 130	126461236
2,4-Dimethylphenol	42200	50000	ug/L	84.4	58.0 - 130	126461236
2,4-Dinitrophenol	45400	50000	ug/L	90.8	39.0 - 173	126461236
2,4-Dinitrotoluene	50900	50000	ug/L	102	53.0 - 130	126461236
2,6-Dinitrotoluene	52000	50000	ug/L	104	68.0 - 137	126461236
2-Chloronaphthalene	41500	50000	ug/L	83.0	70.0 - 130	126461236
2-Chlorophenol	43300	50000	ug/L	86.6	55.0 - 130	126461236
2-Methylphenol (o-Cresol)	37700	50000	ug/L	75.4	60.0 - 140	126461236
2-Nitrophenol	46200	50000	ug/L	92.4	61.0 - 163	126461236
3&4-Methylphenol (m&p-Cresol)	38700	50000	ug/L	77.4	60.0 - 140	126461236
3,3'-Dichlorobenzidine	60900	50000	ug/L	122	18.0 - 213	126461236
4,6-Dinitro-2-methylphenol	47400	50000	ug/L	94.8	56.0 - 130	126461236
4-Bromophenyl phenyl ether	49400	50000	ug/L	98.8	70.0 - 130	126461236
4-Chlorophenyl phenyl ethe	46500	50000	ug/L	93.0	57.0 - 145	126461236
4-Nitrophenol	46000	50000	ug/L	92.0	35.0 - 135	126461236
Acenaphthene	50100	50000	ug/L	100	70.0 - 130	126461236
Acenaphthylene	50000	50000	ug/L	100	60.0 - 130	126461236
Aniline	39000	50000	ug/L	78.0	60.0 - 140	126461236
Anthracene	50700	50000	ug/L	101	58.0 - 130	126461236
Benzidine	27600	50000	ug/L	55.2	20.0 - 180	126461236

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<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Benzo(a)anthracene	50000	50000	ug/L	100	42.0 - 133	126461236
Benzo(a)pyrene	52000	50000	ug/L	104	32.0 - 148	126461236
Benzo(b)fluoranthene	47300	50000	ug/L	94.6	42.0 - 140	126461236
Benzo(ghi)perylene	50600	50000	ug/L	101	13.0 - 195	126461236
Benzo(k)fluoranthene	52400	50000	ug/L	105	25.0 - 146	126461236
Benzyl Butyl phthalate	51600	50000	ug/L	103	43.0 - 140	126461236
Bis(2-chloroethoxy)methane	49600	50000	ug/L	99.2	52.0 - 164	126461236
Bis(2-chloroethyl)ether	44400	50000	ug/L	88.8	52.0 - 130	126461236
Bis(2-chloroisopropyl)ether	47500	50000	ug/L	95.0	63.0 - 139	126461236
Bis(2-ethylhexyl)phthalate	44600	50000	ug/L	89.2	43.0 - 137	126461236
Chrysene (Benzo(a)phenanthrene)	49100	50000	ug/L	98.2	44.0 - 140	126461236
Dibenz(a,h)anthracene	55000	50000	ug/L	110	13.0 - 200	126461236
Diethyl phthalate	50000	50000	ug/L	100	47.0 - 130	126461236
Dimethyl phthalate	51200	50000	ug/L	102	50.0 - 130	126461236
Di-n-butylphthalate	48900	50000	ug/L	97.8	52.0 - 130	126461236
Di-n-octylphthalate	48600	50000	ug/L	97.2	21.0 - 132	126461236
Fluoranthene(Benzo(j,k)fluorene)	49000	50000	ug/L	98.0	47.0 - 130	126461236
Fluorene	49100	50000	ug/L	98.2	70.0 - 130	126461236
Hexachlorobenzene	50400	50000	ug/L	101	38.0 - 142	126461236
Hexachlorobutadiene	45900	50000	ug/L	91.8	68.0 - 130	126461236
Hexachlorocyclopentadiene	43600	50000	ug/L	87.2	60.0 - 140	126461236
Hexachloroethane	45100	50000	ug/L	90.2	55.0 - 130	126461236
Indeno(1,2,3-cd)pyrene	46000	50000	ug/L	92.0	13.0 - 151	126461236
Isophorone	56000	50000	ug/L	112	52.0 - 180	126461236
Naphthalene	47000	50000	ug/L	94.0	70.0 - 130	126461236
Nitrobenzene	40000	50000	ug/L	80.0	54.0 - 158	126461236
n-Nitrosodiethylamine	77500	50000	ug/L	155	60.0 - 140 *	126461236
N-Nitrosodimethylamine	42400	50000	ug/L	84.8	60.0 - 140	126461236
n-Nitroso-di-n-butylamine	46600	50000	ug/L	93.2	60.0 - 140	126461236
N-Nitrosodi-n-propylamine	47900	50000	ug/L	95.8	59.0 - 170	126461236
N-Nitrosodiphenylamine (as DPA	43500	50000	ug/L	87.0	60.0 - 140	126461236
p-Chloro-m-Cresol (4-Chloro-3-me	43800	50000	ug/L	87.6	68.0 - 130	126461236
Pentachlorobenzene	45500	50000	ug/L	91.0	60.0 - 140	126461236
Pentachlorophenol	46600	50000	ug/L	93.2	42.0 - 152	126461236
Phenanthrene	45600	50000	ug/L	91.2	67.0 - 130	126461236
Phenol	38600	50000	ug/L	77.2	48.0 - 130	126461236
Pyrene	47400	50000	ug/L	94.8	70.0 - 130	126461236
Pyridine	42800	50000	ug/L	85.6	60.0 - 140	126461236

DFTPP

<u>Parameter</u>		<u>RefMass</u>	<u>Reading</u>	<u>%</u>	<u>Limits%</u>	<u>File</u>
DFTPP Mass 127	625102	198	57901	52.8	40.0 - 60.0	126461234
DFTPP Mass 197	625102	198	0	0.0	0 - 1.00	126461234
DFTPP Mass 198	625102	198	109643	100.0	100 - 100	126461234
DFTPP Mass 199	625102	198	7184	6.6	5.00 - 9.00	126461234

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DFTPP

<u>Parameter</u>		<u>RefMass</u>	<u>Reading</u>	<u>%</u>	<u>Limits%</u>	<u>File</u>
DFTPP Mass 275	625102	198	32486	29.6	10.0 - 30.0	126461234
DFTPP Mass 365	625102	198	7319	6.7	1.00 - 100	126461234
DFTPP Mass 441	625102	443	3494	16.8	0 - 100	126461234
DFTPP Mass 442	625102	198	107965	98.5	40.0 - 100	126461234
DFTPP Mass 443	625102	442	20743	19.2	17.0 - 23.0	126461234
DFTPP Mass 51	625102	198	35046	32.0	30.0 - 60.0	126461234
DFTPP Mass 68	625102	69.0	0	0.0	0 - 2.00	126461234
DFTPP Mass 69	625102	198	37536	34.2	0 - 100	126461234
DFTPP Mass 70	625102	69.0	0	0.0	0 - 2.00	126461234

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,2,4,5-Tetrachlorobenzene	1121954	10.7	10.2	12.5	27.5 - 85.5	85.6 *	81.6	ug/L	4.78	50.0
1,2,4-Trichlorobenzene	1121954	11.3	9.13	12.5	44.0 - 142	90.4	73.0	ug/L	21.3	50.0
1,2-Dichlorobenzene	1121954	10.1	9.32	12.5	23.0 - 81.8	80.8	74.6	ug/L	7.98	50.0
1,2-DPH (as azobenzene)	1121954	11.9	10.2	12.5	12.6 - 110	95.2	81.6	ug/L	15.4	50.0
1,3-Dichlorobenzene	1121954	10.6	9.26	12.5	21.1 - 80.5	84.8 *	74.1	ug/L	13.5	50.0
1,4-Dichlorobenzene	1121954	10.4	8.53	12.5	21.4 - 76.9	83.2 *	68.2	ug/L	19.8	50.0
2,4,5-Trichlorophenol	1121954	12.7	11.5	12.5	51.3 - 109	102	92.0	ug/L	10.3	50.0
2,4,6-Trichlorophenol	1121954	12.7	11.6	12.5	37.0 - 144	102	92.8	ug/L	9.45	58.0
2,4-Dichlorophenol	1121954	10.8	9.67	12.5	39.0 - 135	86.4	77.4	ug/L	11.0	50.0
2,4-Dimethylphenol	1121954	1.29	1.02	12.5	23.0 - 120	10.3 *	8.16 *	ug/L	23.2	68.0
2,4-Dinitrophenol	1121954	11.1	13.4	12.5	0.100 - 191	88.8	107	ug/L	18.6	132
2,4-Dinitrotoluene	1121954	10.7	12.6	12.5	39.0 - 139	85.6	101	ug/L	16.5	42.0
2,6-Dinitrotoluene	1121954	10.8	12.4	12.5	50.0 - 158	86.4	99.2	ug/L	13.8	48.0
2-Chloronaphthalene	1121954	12.3	9.87	12.5	60.0 - 120	98.4	79.0	ug/L	21.9	24.0
2-Chlorophenol	1121954	11.0	10.1	12.5	23.0 - 134	88.0	80.8	ug/L	8.53	61.0
2-Methylphenol (o-Cresol)	1121954	7.81	7.89	12.5	38.9 - 76.1	62.5	63.1	ug/L	0.955	50.0
2-Nitrophenol	1121954	12.2	10.2	12.5	29.0 - 182	97.6	81.6	ug/L	17.9	55.0
3&4-Methylphenol (m&p-Cresol)	1121954	6.93	6.20	12.5	33.0 - 70.4	55.4	49.6	ug/L	11.0	50.0
3,3'-Dichlorobenzidine	1121954	9.98	8.09	12.5	0.100 - 262	79.8	64.7	ug/L	20.9	108
4,6-Dinitro-2-methylphenol	1121954	10.7	10.6	12.5	0.100 - 181	85.6	84.8	ug/L	0.939	203
4-Bromophenyl phenyl ether	1121954	12.6	11.3	12.5	53.0 - 127	101	90.4	ug/L	11.1	43.0
4-Chlorophenyl phenyl ether	1121954	10.8	11.4	12.5	25.0 - 158	86.4	91.2	ug/L	5.41	61.0
4-Nitrophenol	1121954	3.82	5.60	12.5	0.100 - 132	30.6	44.8	ug/L	37.7	131
Acenaphthene	1121954	12.1	12.3	12.5	47.0 - 145	96.8	98.4	ug/L	1.64	48.0
Acenaphthylene	1121954	11.6	10.7	12.5	33.0 - 145	92.8	85.6	ug/L	8.07	74.0
Aniline	1121954	7890	7210	12500	70.0 - 130	63.1 *	57.7 *	ug/L	8.94	50.0
Anthracene	1121954	12.4	10.5	12.5	27.0 - 133	99.2	84.0	ug/L	16.6	66.0
Benzo(a)anthracene	1121954	11.1	10.5	12.5	33.0 - 143	88.8	84.0	ug/L	5.56	53.0
Benzo(a)pyrene	1121954	11.4	10.9	12.5	17.0 - 163	91.2	87.2	ug/L	4.48	72.0
Benzo(b)fluoranthene	1121954	10.3	10.4	12.5	24.0 - 159	82.4	83.2	ug/L	0.966	71.0
Benzo(ghi)perylene	1121954	12.3	11.1	12.5	0.100 - 219	98.4	88.8	ug/L	10.3	97.0
Benzo(k)fluoranthene	1121954	12.4	12.2	12.5	11.0 - 162	99.2	97.6	ug/L	1.63	63.0
Benzyl Butyl phthalate	1121954	11.8	10.8	12.5	0.100 - 152	94.4	86.4	ug/L	8.85	60.0

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LCS Dup

Parameter	PrepSet	LCS	LCS D	Known	Limits%	LCS%	LCS D%	Units	RPD	Limit%
Bis(2-chloroethoxy)methane	1121954	12.5	10.6	12.5	33.0 - 184	100	84.8	ug/L	16.5	54.0
Bis(2-chloroethyl)ether	1121954	11.9	10.2	12.5	12.0 - 158	95.2	81.6	ug/L	15.4	108
Bis(2-chloroisopropyl)ether	1121954	11.9	12.6	12.5	36.0 - 166	95.2	101	ug/L	5.91	76.0
Bis(2-ethylhexyl)phthalate	1121954	12.5	12.6	12.5	8.00 - 158	100	101	ug/L	0.995	82.0
Chrysene (Benzo(a)phenanthrene)	1121954	11.5	9.88	12.5	17.0 - 168	92.0	79.0	ug/L	15.2	87.0
Dibenz(a,h)anthracene	1121954	12.0	10.7	12.5	0.100 - 227	96.0	85.6	ug/L	11.5	126
Diethyl phthalate	1121954	12.2	12.1	12.5	0.100 - 120	97.6	96.8	ug/L	0.823	100
Dimethyl phthalate	1121954	11.4	11.8	12.5	0.100 - 120	91.2	94.4	ug/L	3.45	183
Di-n-butylphthalate	1121954	13.1	11.0	12.5	1.00 - 120	105	88.0	ug/L	17.6	47.0
Di-n-octylphthalate	1121954	11.2	11.2	12.5	4.00 - 146	89.6	89.6	ug/L	0	69.0
Fluoranthene(Benzo(j,k)fluorene)	1121954	12.9	12.4	12.5	26.0 - 137	103	99.2	ug/L	3.76	66.0
Fluorene	1121954	11.5	12.3	12.5	59.0 - 121	92.0	98.4	ug/L	6.72	38.0
Hexachlorobenzene	1121954	12.2	10.9	12.5	0.100 - 152	97.6	87.2	ug/L	11.3	55.0
Hexachlorobutadiene	1121954	10.6	7.47	12.5	24.0 - 120	84.8	59.8	ug/L	34.6	62.0
Hexachlorocyclopentadiene	1121954	7.27	7.00	12.5	3.97 - 68.7	58.2	56.0	ug/L	3.85	50.0
Hexachloroethane	1121954	9.64	7.78	12.5	40.0 - 120	77.1	62.2	ug/L	21.4	52.0
Indeno(1,2,3-cd)pyrene	1121954	12.2	10.6	12.5	0.100 - 171	97.6	84.8	ug/L	14.0	99.0
Isophorone	1121954	12.0	11.1	12.5	21.0 - 196	96.0	88.8	ug/L	7.79	93.0
Naphthalene	1121954	10.6	9.59	12.5	21.0 - 133	84.8	76.7	ug/L	10.0	65.0
Nitrobenzene	1121954	10.9	8.82	12.5	35.0 - 180	87.2	70.6	ug/L	21.0	62.0
n-Nitrosodiethylamine	1121954	23.7	20.1	12.5	18.0 - 100	190 *	161 *	ug/L	16.5	50.0
N-Nitrosodimethylamine	1121954	7.94	7.85	12.5	30.2 - 74.9	63.5	62.8	ug/L	1.11	50.0
n-Nitroso-di-n-butylamine	1121954	11.1	12.2	12.5	48.4 - 98.5	88.8	97.6	ug/L	9.44	50.0
N-Nitrosodi-n-propylamine	1121954	12.4	10.7	12.5	0.100 - 230	99.2	85.6	ug/L	14.7	87.0
N-Nitrosodiphenylamine (as DPA	1121954	10.8	9.96	12.5	49.3 - 94.2	86.4	79.7	ug/L	8.07	50.0
p-Chloro-m-Cresol (4-Chloro-3-me	1121954	9.94	11.8	12.5	22.0 - 147	79.5	94.4	ug/L	17.1	70.0
Pentachlorobenzene	1121954	9.99	10.6	12.5	39.3 - 93.7	79.9	84.8	ug/L	5.95	50.0
Pentachlorophenol	1121954	11.4	11.9	12.5	14.0 - 176	91.2	95.2	ug/L	4.29	86.0
Phenanthrene	1121954	12.0	11.4	12.5	54.0 - 120	96.0	91.2	ug/L	5.13	39.0
Phenol	1121954	5.05	4.83	12.5	5.00 - 120	40.4	38.6	ug/L	4.56	64.0
Pyrene	1121954	10.5	10.5	12.5	52.0 - 120	84.0	84.0	ug/L	0	49.0
Pyridine	1121954	6.50	5.82	12.5	11.2 - 50.6	52.0 *	46.6	ug/L	11.0	50.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	625306	CCV	44300	100000	ug/L	44.3	10.0 - 150	126461236
2-Fluorophenol-SURR	625306	CCV	39200	100000	ug/L	39.2	10.0 - 150	126461236
4-Terphenyl-d14-SURR	625306	CCV	40600	50000	ug/L	81.2	30.0 - 150	126461236
Nitrobenzene-d5-SURR	625306	CCV	43500	50000	ug/L	87.0	30.0 - 150	126461236
Phenol-d6-SURR	625306	CCV	44100	100000	ug/L	44.1	10.0 - 150	126461236
2,4,6-Tribromophenol	1121954	Blank	66.8	100	ug/L	66.8	10.0 - 150	126461237
2,4,6-Tribromophenol	1121954	LCS	61.8	100	ug/L	61.8	10.0 - 150	126461238
2,4,6-Tribromophenol	1121954	LCS Dup	64.6	100	ug/L	64.6	10.0 - 150	126461239
2-Fluorophenol-SURR	1121954	Blank	31400	100000	ug/L	31.4	10.0 - 150	126461237
2-Fluorophenol-SURR	1121954	LCS	36400	100000	ug/L	36.4	10.0 - 150	126461238

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Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2-Fluorophenol-SURR	1121954	LCS Dup	33800	100000	ug/L	33.8	10.0 - 150	126461239
4-Terphenyl-d14-SURR	1121954	Blank	35400	50000	ug/L	70.8	30.0 - 150	126461237
4-Terphenyl-d14-SURR	1121954	LCS	19500	50000	ug/L	39.0	30.0 - 150	126461238
4-Terphenyl-d14-SURR	1121954	LCS Dup	19500	50000	ug/L	39.0	30.0 - 150	126461239
Nitrobenzene-d5-SURR	1121954	Blank	43700	50000	ug/L	87.4	30.0 - 150	126461237
Nitrobenzene-d5-SURR	1121954	LCS	20900	50000	ug/L	41.8	30.0 - 150	126461238
Nitrobenzene-d5-SURR	1121954	LCS Dup	17300	50000	ug/L	34.6	30.0 - 150	126461239
Phenol-d6-SURR	1121954	Blank	27800	100000	ug/L	27.8	10.0 - 150	126461237
Phenol-d6-SURR	1121954	LCS	25900	100000	ug/L	25.9	10.0 - 150	126461238
Phenol-d6-SURR	1121954	LCS Dup	24500	100000	ug/L	24.5	10.0 - 150	126461239
2,4,6-Tribromophenol	2302895	Unknown	76.1	98.8	ug/L	77.0	10.0 - 150	126461243
2-Fluorophenol-SURR	2302895	Unknown	41.1	98.8	ug/L	41.6	10.0 - 150	126461243
4-Terphenyl-d14-SURR	2302895	Unknown	35.3	49.4	ug/L	71.5	30.0 - 150	126461243
Nitrobenzene-d5-SURR	2302895	Unknown	36.1	49.4	ug/L	73.1	30.0 - 150	126461243
Phenol-d6-SURR	2302895	Unknown	28.9	98.8	ug/L	29.3	10.0 - 150	126461243

Analytical Set

1121775

SM 5220 D-2011

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Chemical Oxygen Demand	422	400	mg/L	106	90.0 - 110	126389115

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Chemical Oxygen Demand	2302625	ND	ND	mg/L		20.0
Chemical Oxygen Demand	2303054	32.7	30.5	mg/L	6.96	20.0

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File
Chemical Oxygen Demand	1121775	203	200	mg/L	102	90.0 - 110	126389116

Mat. Spike

Parameter	Sample	Spike	Unknown	Known	Units	Recovery %	Limits %	File
Chemical Oxygen Demand	2302625	238	ND	220	mg/L	108	80.0 - 120	126389119
Chemical Oxygen Demand	2303054	253	30.5	220	mg/L	101	80.0 - 120	126389128

Analytical Set

1121996

SM 4500-P E-2011

AWRL/LOQ C

Parameter	Reading	Known	Units	Recover%	Limits%	File
Phosphorus (as P), total	0.0662	0.060	mg/L	110	70.0 - 130	126393751

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Phosphorus (as P), total	1121996	ND	0.00311	0.00311	mg/L	126393749

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File

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CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Phosphorus (as P), total	0.312	0.300	mg/L	104	90.0 - 110	126393752
Phosphorus (as P), total	0.306	0.300	mg/L	102	90.0 - 110	126393767
Phosphorus (as P), total	0.309	0.300	mg/L	103	90.0 - 110	126394129

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Phosphorus (as P), total	1121996	0.307	0.299	0.300	80.0 - 120	102	99.7	mg/L	2.64	20.0

MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Phosphorus (as P), total	2302930	0.265	0.257	0.120	0.150	70.0 - 130	96.7	91.3	mg/L	5.67	20.0
Phosphorus (as P), total	2302931	0.345	0.331	0.191	0.150	70.0 - 130	103	93.3	mg/L	9.52	20.0

Analytical Set

1122797

SM 2320 B-2011

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Total Alkalinity (as CaCO3)	1122797	ND	1.00	1.00	mg/L	126418426

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Total Alkalinity (as CaCO3)	24.5	25.0	mg/L	98.0	90.0 - 110	126418425
Total Alkalinity (as CaCO3)	25.4	25.0	mg/L	102	90.0 - 110	126418438

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Total Alkalinity (as CaCO3)	2302842	785	789	mg/L	0.508	20.0

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Total Alkalinity (as CaCO3)	26.9	25.0	mg/L	108	90.0 - 110	126418424

Mat. Spike

<u>Parameter</u>	<u>Sample</u>	<u>Spike</u>	<u>Unknown</u>	<u>Known</u>	<u>Units</u>	<u>Recovery %</u>	<u>Limits %</u>	<u>File</u>
Total Alkalinity (as CaCO3)	2302842	819	789	25.0	mg/L	120	70.0 - 130	126418429

Analytical Set

1123697

SM 2130 B-2011

AWRL/LOQ C

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Turbidity	0.350	0.300	NTU	117	70.0 - 130	126440048

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Turbidity	1123697	ND	0.300	0.300	NTU	126440046

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Turbidity	2305623	3.40	3.04	NTU	11.2	20.0

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Duplicate						
Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Turbidity	2307012	0.580	0.520	NTU	10.9	20.0
Mat. Spike						
Parameter	Sample	Spike	Unknown	Known	Units	Recovery % Limits % File
Turbidity	2305623	44.5	3.04	40.0	NTU	104 70.0 - 130 126440052
Turbidity	2307012	41.2	0.520	40.0	NTU	102 70.0 - 130 126440065
Standard						
Parameter	Sample	Reading	Known	Units	Recover%	Limits% File
Turbidity	1123697	10.1	10.0	NTU	101	90.0 - 110 126440047
Turbidity	1123697	101	100	NTU	101	90.0 - 110 126440049
Turbidity	1123697	10.0	10.0	NTU	100	90.0 - 110 126440060
Turbidity	1123697	10.4	10.0	NTU	104	90.0 - 110 126441062

* Out RPD is Relative Percent Difference: $\text{abs}(r1-r2) / \text{mean}(r1,r2) * 100\%$

Recover% is Recovery Percent: $\text{result} / \text{known} * 100\%$

Blank - Method Blank (reagent water or other blank matrices that contains all reagents except standard(s) and is processed simultaneously with and under the same conditions as samples; carried through preparation and analytical procedures exactly like a sample; monitors); MSD - Matrix Spike Duplicate (replicate of the matrix spike; same solution and amount of target analyte added to the MS is added to a third aliquot of sample; quantifies matrix bias and precision.); LCS Dup - Laboratory Control Sample Duplicate (replicate LCS; analyzed when there is insufficient sample for duplicate or MSD; quantifies accuracy and precision.); BFB - Bromofluorobenzene, GC/MS Tuning Compound (mass intensity used as tuning acceptance criteria.); Surrogate - Surrogate (mimics the analyte of interest but is unlikely to be found in environmental samples; added to analytical samples for QC purposes. **ANSI/ASQC E4 1994 Ref #4 TRADE QA Resources Guide.); IS Areas - Internal Standard Area (The area of the internal standard relative to a check standard. Internal Standard is a known concentration of an analyte(s) that is not a sample component or standard that is added to the sample and standard and is used to measure the relative responses of other analytes in the same sample or standard.); IS RetTime - Internal Standard Retention Time (the time the internal standard comes off the column. Internal Standard is a known concentration of an analyte(s) that is not a sample component or standard that is added to the sample and standard and is used to measure the relative responses of other analytes in the same sample or standard.); LCS - Laboratory Control Sample (reagent water or other blank matrices that is spiked with a known quantity of target analyte(s) and carried through preparation and analytical procedures exactly like a sample; typically a mid-range concentration; verifies that bias and precision of the analytical process are within control limits; determines usability of the data.); CCV - Continuing Calibration Verification (same standard used to prepare the curve; typically a mid-range concentration; verifies the continued validity of the calibration curve); CCB - Continuing Calibration Blank; AWRL/LOQ C - Ambient Water Reporting Limit/LOQ Check Std; ICV - Initial Calibration Verification; LDR - Linear Dynamic Range Standard; MRL Check - Minimum Reporting Limit Check Std; MS - Matrix Spike (same solution and amount of target analyte added to the LCS is added to a second aliquot of sample; quantifies matrix bias.); DFTPP - GC/MS Tuning Compound

Email: Kilgore.ProjectManagement@spllabs.com



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2600 Dudley Rd. Kilgore, Texas 75662
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SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

SPAC-R
188

Lab Number 2302893 Mandatory
PO Number 2605353
Phone 956/543-6688

Hand Delivered by Client to Region or LAB

Matrix: Non-Potable Water

Sample Collection Start

Date: 5/29/24 Time: 0830
 Sampler Printed Name: Zachary Smith
 Sampler Affiliation: Space X
 Sampler Signature: [Signature]

☐ Samples Radioactive?

☐ Samples Contains Diuron?

☐ Samples Biological Hazard?

0 On Site Testing

pH

pH Client Provided

SM 4500-H+ B-2011

pH Client Provided

Collected By ZS Date 5/29/24 Time 0830 Analyzed By ZS Date 5/29/24 Time 0832

Results 7.51 Units SV Temp. 28.1 °C Duplicate 7.51 Units SV Temp. 28.1 °C

1	Polyethylene 1/2 gal (White)

VELAC

Short Hold

BODc

BOD Carbonaceous

SM 5210 B-2016 (TCMP Inhibitor) (2.00 days)



1105141 CoC Print Group 001 of 001

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SPAC-R
188

Phone

Mandatory
 956/543-6688

1 Polyethylene Quart

NELAC

Short Hold

TURB

Turbidity

SM 2130 B-2011 (2.00 days)

Ambient Conditions/Comments

Date/Time	Released	Date/Time	Received
5/29/24 0900	Printed Name: Zachary Smith Signature: [Signature] Affiliation: SPACEX	5/29 0402	Printed Name: Leo Munoz Signature: [Signature] Affiliation: [Affiliation]
5/29/24 9:32	Printed Name: Leo Munoz Signature: [Signature] Affiliation: [Affiliation]	5/29/24 9:32	Printed Name: [Signature] Signature: [Signature] Affiliation: SPL
5/29/24 17:30	Printed Name: [Signature] Signature: [Signature] Affiliation: SPL	5/29/24 17:30	Printed Name: [Signature] Signature: FedEx Affiliation: [Affiliation]
5/30/24 1110	Printed Name: [Signature] Signature: FedEx Affiliation: FedEx	5-30-24 1110	Printed Name: Andy Owens - SPL, Inc. Signature: [Signature] Affiliation: [Affiliation]

Sample Received on Ice?

☒ Yes ☐ No

Cooler/Sample Secure?

☒ Yes ☐ No

If Shipped: Tracking Number & Temp - See Attached

The accredited column designates accreditation by A - A2LA, N - NELAC, or Z - not listed under scope of accreditation. Unless otherwise specified, ANA-LAB shall provide these ordered services pursuant to our Standard Terms & Conditions Agreement (available for download from the welcome page at <<http://www.ana-lab.com>>). Ana-Lab personnel collect samples as specified by Ana-Lab SOP #000323.

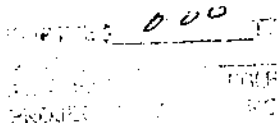
Comments



RGV Region: 2401 Village Dr. Suite C Brownsville TX 78521

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SPACEX
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SPAC-R
178

Lab Number 2302894
Mandatory 2605353
PO Number 2605353
Phone 956/543-6688

INFLUENT

Hand Delivered by Client to Region or LAB

Matrix: Non-Potable Water

Sample Collection Start

Date: 5/29/24 Time: 0830Sampler Printed Name: Zachary SmithSampler Affiliation: SPACEXSampler Signature: [Signature]☐ Samples Radioactive?☐ Samples Contain Dioxin?☐ Samples Biological Hazard?☒ 1

Polyethylene 1/2 gal (White)

NELAC

Short Hold

BOD

Biochemical Oxygen Demand (BOD5)

SM 5210 B-2016 CAS:1026-3 (2.04 days)

☒ 1

H2SO4 to pH <2 250 ml Polyethylene

NELAC

NHAN

Ammonia Nitrogen

EPA 350.1 2 (28.0 days)

Ambient Conditions/Comments

Date Time	Relinquished	Date Time	Received
5/29/24 0900	Printed Name: <u>Zachary Smith</u> Signature: <u>[Signature]</u> Affiliation: <u>SPACEX</u>	06/03/24 1903	Printed Name: <u>Leo Munoz</u> Signature: <u>[Signature]</u> Affiliation: <u>[Signature]</u>
5/29/24 9:32	Printed Name: <u>Leo Munoz</u> Signature: <u>[Signature]</u> Affiliation: <u>[Signature]</u>	5/29/24 9:32	Printed Name: <u>[Signature]</u> Signature: <u>[Signature]</u> Affiliation: <u>SPL</u>
5/29/24 12:30	Printed Name: <u>[Signature]</u> Signature: <u>[Signature]</u> Affiliation: <u>SPL</u>	5/29/24 17:13	Printed Name: <u>[Signature]</u> Signature: <u>[Signature]</u> Affiliation: <u>FedEx</u>
5/30/24 1110	Printed Name: <u>[Signature]</u> Signature: <u>[Signature]</u> Affiliation: <u>FedEx</u>	5/30/24 1110	Printed Name: <u>Andy Owens - SPL, Inc.</u> Signature: <u>[Signature]</u> Affiliation: <u>[Signature]</u>



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SPL
The Science of Sure

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SPACE
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SPAC-R
194

Lab Number 2302895
PO Number _____ Mandatory
Phone 956/543-6688

Waste Water

Retention Pond



Hand Delivered by Client to Region or LAB

Matrix: Non-Potable Water

Sample Collection Start

Date: 5.28.24 Time: 3:50 PMSampler Printed Name: CAROLYN WOODSampler Affiliation: SPACEXSampler Signature: Carolyn A. WoodSamples Radioactive? ☐Samples Contain Dioxin? ☐Samples Biological Hazard? ☐

0

On Site Testing

NELAC

C20

C12 Res., Total(Onsite)Spec Mid

SM 4500-C1 G-2011

C12 Res., Total(Onsite)Spec Mid

Collected By CW Date 5.28.24 Time 3:50 PM Analyzed By _____ Date _____ Time _____

Results _____ Units _____ Temp. _____ C Duplicate _____ Units _____ Temp. _____ C

R1 _____ R2 _____ QC R1 _____ QC R2 _____

by client
Total C12
0.2 mg/L

C12

Field C12 Check for CNA

Field C12 Check for CNA

Collected By CW Date 5.28.24 Time 3:50 PM Analyzed By _____ Date _____ Time _____

Results _____ Units _____ Temp. _____ C Duplicate _____ Units _____ Temp. _____ C

R1 _____ R2 _____ QC R1 _____ QC R2 _____

NELAC Short Hold

C12

Hex Cr. Field Preservation

SM 3500-Cr B-2011 CAS:18540-29-9 (1.00 days)



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Brownsville, TX 78521

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194

Hex Cr, Field Preservation

Collected By CW Date 5-28-24 Time 3:57p Analyzed By Jmz Date 5/28/24 Time 18:40

NELAC Short Hold

DO

Dissolved Oxygen Onsite

SM 4500-O G-2016 (0.0104 days)

Dissolved Oxygen Onsite

Collected By CW Date 5-28-24 Time 3:50p Analyzed By _____ Date _____ Time _____

Results _____ Units _____ Temp. _____ C Duplicate _____ Units _____ Temp. _____ C

NELAC Short Hold

pH

pH (Onsite)

SM 4500-H B-2011 (0.0104 days)

pH (Onsite)

Collected By CW Date 5-28-24 Time 3:50p Analyzed By _____ Date _____ Time _____

by client
pH 6.97

Results _____ Units _____ Temp. _____ C Duplicate _____ Units _____ Temp. _____ C

S2O₃²⁻

Field Sulfide Check for CNa

Field Sulfide Check for CNa

Collected By CW Date 5-28-24 Time 3:50p Analyzed By _____ Date _____ Time _____

Results _____ Units _____ Temp. _____ C Duplicate _____ Units _____ Temp. _____ C

R1

R2

QC R1

QC R2

NELAC Short Hold

Temp

Temperature (onsite)

SM 2550 B - 2010 (0.0104 days)



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SPAC-R
194

Temperature (outside)

Collected By CW Date 5.25.24 Time 3:54P Analyzed By _____ Date _____ Time _____

Results _____ Units _____ Duplicate _____ Units _____

2 Amber Glass Qt w/Teflon lined lid

NELAC	ID2S	Table D-1/ D-2 Semivolatiles Exp	EPA 625.1 (7.00 days)
NELAC	IPCB	Polychlorinated Biphenyls	EPA 608.3 (7.00 days)

2 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid

NELAC	Short Hold	SAAB	Acrolein/Acrylonitrile Exp.	EPA 624.1 (3.00 days)

2 H2SO4 to pH <2 GIQt w/Tef-lined lid

	NYPB	Nonyl Phenol Expansion	ASTM D7065-11 (14.0 days)

1 H2SO4 to pH <2 GIQt w/Tef-lined lid

NELAC	HEM	Oil and Grease (HEM)	EPA 1664B (HEM) (28.0 days)

1 Polyethylene 1/2 gal (White)

NELAC	Short Hold	BOD	Biochemical Oxygen Demand (BOD5)	SM 5210 B-2016 CAS:1026-3 (2.04 days)
NELAC	Short Hold	BODc	BOD Carbonaceous	SM 5210 B-2016 (TCMP Inhibitor) (2.04 days)
NELAC		TSS	Total Suspended Solids	SM 2540 D-2015 (7.00 days)

0 Z - No bottle required

	CKLM	Check Limits		
NELAC	Short Hold	Cr+3	Trivalent Chromium	Calculation CAS:16065-R3-1 (1.00 days)

1 HNO3 to pH <2 Polyethylene 500 mL for Metals

NELAC	*AgM	Silver, Total	EPA 200.8 5.4 CAS:7440-22-4 (180 days)
NELAC	*AlM	Aluminum, Total	EPA 200.8 5.4 CAS:7429-90-5 (180 days)



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NELAC	*AsM	Arsenic, Total	EPA 200.8 5.4 CAS:7440-38-2 (180 days)
NELAC	*BaM	Barium, Total	EPA 200.8 5.4 CAS:7440-39-3 (180 days)
NELAC	*BeM	Beryllium, Total	EPA 200.8 5.4 CAS:7440-41-7 (180 days)
NELAC	*CdM	Cadmium, Total	EPA 200.8 5.4 CAS:7440-43-9 (180 days)
NELAC	*CrM	Chromium, Total	EPA 200.8 5.4 CAS:7440-47-3 (180 days)
NELAC	*CuM	Copper, Total	EPA 200.8 5.4 CAS:7440-50-8 (180 days)
NELAC	*Hg	Mercury, Total	EPA 245.1 3 CAS:7439-97-6 (28.0 days)
NELAC	*NiM	Nickel, Total	EPA 200.8 5.4 CAS:7440-02-0 (180 days)
NELAC	*PbM	Lead, Total	EPA 200.8 5.4 CAS:7439-92-1 (180 days)
NELAC	*SbM	Antimony, Total	EPA 200.8 5.4 CAS:7440-36-0 (180 days)
NELAC	*SeM	Selenium, Total	EPA 200.8 5.4 CAS:7782-49-2 (180 days)
NELAC	*TlM	Thallium, Total	EPA 200.8 5.4 CAS:7440-28-0 (180 days)
NELAC	*ZnM	Zinc, Total	EPA 200.8 5.4 CAS:7440-66-6 (180 days)
	301L	Liquid Metals Digestion	EPA 200.2 2.8 (180 days)
NELAC	747L	Mercury Liquid Metals Digestion	EPA 245.1 3 (28.0 days)

3 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)

Short Hold ID2V Table D-1/D-2 Volatile Expansion EPA 624.1 (3.00 days)

2 H2SO4 to pH <2 250 ml Polyethylene

NELAC	OOD	Chemical Oxygen Demand	SM 5220 D-2011 (28.0 days)
NELAC	NHAN	Ammonia Nitrogen	EPA 350.1 2 (28.0 days)
	OrgN	Nitrogen, Total Organic (as N)	EPA 351.2 minus EPA 350.1 (28.0 days)
NELAC	TKN	Total Kjeldahl Nitrogen	EPA 351.2 2 CAS:7727-37-9 (28.0 days)
NELAC	TFWB	Phosphorus (as P), total	SM 4500-P E-2011 CAS:7723-14-0 (28.0 days)

1 H2SO4 to pH <2 Glass 250 mL w/Teflon lined lid

NELAC TOCL Total Organic Carbon SM 5310 C-2014 (28.0 days)



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SPAC-R
194

2 NaOH to pH >12 Polyethylene 250 mL/amber

NELAC	CN ⁻	Cyanide, total	SM 4500-CN ⁻ E-2016 (14.0 days)
NELAC	CN ⁻ A	Cyanide - Available/Amenable	SM 4500-CN ⁻ G-2016 (14.0 days)
NELAC	CNCl	Cyanide After Chlorination	SM 4500-CN ⁻ G-2016 (14.0 days)

1 Polyethylene Quart

NELAC	ICL	Chloride	EPA 300.0 2.1 (28.0 days)
NELAC	FFL	Fluoride	EPA 300.0 2.1 (28.0 days)
NELAC Short Hold	NTL	Nitrate-Nitrogen Total	EPA 300.0 2.1 CAS:14797-55-8 (2.00 days)
NELAC	ISL	Sulfate	EPA 300.0 2.1 (28.0 days)
NELAC	AlkT	Total Alkalinity (as CaCO ₃)	SM 2320 B-2011 (14.0 days)
NELAC Short Hold	Cr+6	Hexavalent Chromium	SM 3500-Cr B-2011 CAS:18540-29-9 (1.00 days)
NELAC	TDS	Total Dissolved Solids	SM 2540 C-2015 (7.00 days)

Ambient Conditions/Comments

Date	Time	Relinquished	Received
5-28-24	6:20 pm	Printed Name: Carolyn Wood Signature: Carolyn D. Wood Affiliation: SPACEX	Printed Name: [Signature] Signature: [Signature] Affiliation: SPL
5/29/24	12:12	Printed Name: [Signature] Signature: [Signature] Affiliation: SPL	Printed Name: [Signature] Signature: FedEx Affiliation: FedEx
		Printed Name: [Signature] Signature: FedEx Affiliation: FedEx	Printed Name: [Signature] Signature: [Signature] Affiliation: [Signature]
		Printed Name: [Signature] Signature: [Signature] Affiliation: [Signature]	Printed Name: [Signature] Signature: [Signature] Affiliation: [Signature]



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1105141 CoC Print Group 001 of 001

ORIGIN ID: HRLA
ANA LAB / RGV
2401 VILLAGE DR ST
BROWNSVILLE, TX 77801
UNITED STATES US

SHIP DATE: 29MAY24
ACTWT: 70.05 LB
CAD: 6894257/SSFE2500
DIMS: 24x14x13 IN
BILL THIRD PARTY

TO SPL
LOGIN
2600 DUDLEY RD
KILGORE TX 75662
(565) 565-8665
INVT
PG1

SHIP DATE: 29MAY24
ACTWT: 70.05 LB
CAD: 6894257/SSFE2500
DIMS: 24x14x13 IN
BILL THIRD PARTY

3 of 3
MP# 2752 6939 0395
Matr# 8171 3103 550
XS GOGA

THU - 30 MAY 10:30A
PRIORITY OVERNIGHT
AHS
75662
SHV

DATE: 5/30
TIME: 11:10
TECH: ANU
TEMP: 1.3 1.4 C
Therm#: 6443 Corr Fact: 0.1 C

FedEx
Express
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Project
1106094

SPAC-R

SPACEX
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Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Printed 06/26/2024
16:57

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1106094_r03_03_ProjectResults	SPL Kilgore Project P:1106094 C:SPAC Project Results t:304 PO: 2305623-5	13
1106094_r10_05_ProjectQC	SPL Kilgore Project P:1106094 C:SPAC Project Quality Control Groups	31
1106094_r99_09_CoC__1_of_1	SPL Kilgore CoC SPAC 1106094_1_of_1	7
Total Pages:		60



SAMPLE CROSS REFERENCE

Project

1106094

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6/26/2024

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SPACEX
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Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Sample	Sample ID	Taken	Time	Received
2305623	WW - Retention Pond	06/06/2024	13:30:00	06/07/2024

Bottle 01 Polyethylene 1/2 gal (White)
Bottle 02 Polyethylene Quart
Bottle 03 Amber 32 Oz
Bottle 04 Amber 32 Oz
Bottle 05 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 06 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 07 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 08 16 oz HNO3 Metals Plastic
Bottle 09 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 10 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 11 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 12 Cr+6 Preserved 250 Polyethylene
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 17 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 18 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 19 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122859) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 21 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 22 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 24 BOD Titration Beaker A (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 25 BOD Analytical Beaker B (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 26 BOD Titration Beaker A (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1122995) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1123008) Volume: 6.00000 mL <== Derived from 14 (6 ml)
Bottle 30 Prepared Bottle: Mercury Preparation for Metals (Batch 1123013) Volume: 50.00000 mL <== Derived from 08 (25 ml)
Bottle 31 Prepared Bottle: ICP Preparation for Metals (Batch 1123060) Volume: 50.00000 mL <== Derived from 08 (50 ml)
Bottle 32 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1123138) Volume: 10.00000 mL <== Derived from 03 (1025 ml)
Bottle 33 Prepared Bottle: 2 mL Autosampler Vial (Batch 1123370) Volume: 1.00000 mL <== Derived from 04 (939 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1124341) Volume: 1.00000 mL <== Derived from 07 (862 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 608.3	32	1123138	06/10/2024	1123853	06/13/2024
EPA 300.0 2.1	01	1123092	06/07/2024	1123092	06/07/2024
EPA 300.0 2.1	01	1124447	06/18/2024	1124447	06/18/2024
EPA 625.1	33	1123370	06/11/2024	1125008	06/18/2024

Email: Kilgore.ProjectManagement@spllabs.com

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SAMPLE CROSS REFERENCE

Project

1106094

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SPACEX
 Rodolfo Longoria
 Space Exploration Technologies
 1 Rocket Rd
 Brownsville, TX 78521

Sample	Sample ID	Taken	Time	Received
2305623	WW - Retention Pond	06/06/2024	13:30:00	06/07/2024

Bottle 01 Polyethylene 1/2 gal (White)
 Bottle 02 Polyethylene Quart
 Bottle 03 Amber 32 Oz
 Bottle 04 Amber 32 Oz
 Bottle 05 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 06 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 07 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 08 16 oz HNO3 Metals Plastic
 Bottle 09 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
 Bottle 10 NaOH to pH >12 Polyethylene 250 mL/amber
 Bottle 11 NaOH to pH >12 Polyethylene 250 mL/amber
 Bottle 12 Cr+6 Preserved 250 Polyethylene
 Bottle 13 8 oz Plastic H2SO4 pH < 2
 Bottle 14 8 oz Plastic H2SO4 pH < 2
 Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
 Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
 Bottle 17 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
 Bottle 18 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
 Bottle 19 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
 Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122859) Volume: 10.00000 mL <== Derived from 11 (5 ml)
 Bottle 21 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
 Bottle 22 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
 Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
 Bottle 24 BOD Titration Beaker A (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 25 BOD Analytical Beaker B (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 26 BOD Titration Beaker A (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 27 BOD Analytical Beaker B (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1122995) Volume: 20.00000 mL <== Derived from 14 (20 ml)
 Bottle 29 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1123008) Volume: 6.00000 mL <== Derived from 14 (6 ml)
 Bottle 30 Prepared Bottle: Mercury Preparation for Metals (Batch 1123013) Volume: 50.00000 mL <== Derived from 08 (25 ml)
 Bottle 31 Prepared Bottle: ICP Preparation for Metals (Batch 1123060) Volume: 50.00000 mL <== Derived from 08 (50 ml)
 Bottle 32 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1123138) Volume: 10.00000 mL <== Derived from 03 (1025 ml)
 Bottle 33 Prepared Bottle: 2 mL Autosampler Vial (Batch 1123370) Volume: 1.00000 mL <== Derived from 04 (939 ml)
 Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1124341) Volume: 1.00000 mL <== Derived from 07 (862 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 624.1	19	1123033	06/07/2024	1123033	06/07/2024
EPA 624.1	16	1123030	06/07/2024	1123030	06/07/2024
ASTM D7065-11	34	1124341	06/17/2024	1124948	06/19/2024
EPA 200.8 5.4	32	1123138	06/10/2024	1123222	06/10/2024

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Brownsville, TX 78521

Sample	Sample ID	Taken	Time	Received
2305623	WW - Retention Pond	06/06/2024	13:30:00	06/07/2024

- Bottle 01 Polyethylene 1/2 gal (White)
Bottle 02 Polyethylene Quart
Bottle 03 Amber 32 Oz
Bottle 04 Amber 32 Oz
Bottle 05 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 06 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 07 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 08 16 oz HNO3 Metals Plastic
Bottle 09 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 10 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 11 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 12 Cr+6 Preserved 250 Polyethylene
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 17 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 18 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 19 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122859) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 21 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
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Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 24 BOD Titration Beaker A (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 25 BOD Analytical Beaker B (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 26 BOD Titration Beaker A (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1122995) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1123008) Volume: 6.00000 mL <== Derived from 14 (6 ml)
Bottle 30 Prepared Bottle: Mercury Preparation for Metals (Batch 1123013) Volume: 50.00000 mL <== Derived from 08 (25 ml)
Bottle 31 Prepared Bottle: ICP Preparation for Metals (Batch 1123060) Volume: 50.00000 mL <== Derived from 08 (50 ml)
Bottle 32 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1123138) Volume: 10.00000 mL <== Derived from 03 (1025 ml)
Bottle 33 Prepared Bottle: 2 mL Autosampler Vial (Batch 1123370) Volume: 1.00000 mL <== Derived from 04 (939 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1124341) Volume: 1.00000 mL <== Derived from 07 (862 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 200.8 5.4	31	1123060	06/10/2024	1123439	06/11/2024
EPA 200.7 4.4	31	1123060	06/10/2024	1123677	06/12/2024
EPA 245.1 3	30	1123013	06/10/2024	1123073	06/10/2024
EPA 200.8 5.4	31	1123060	06/10/2024	1124795	06/19/2024

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2305623	WW - Retention Pond	06/06/2024	13:30:00	06/07/2024

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Bottle 02 Polyethylene Quart
Bottle 03 Amber 32 Oz
Bottle 04 Amber 32 Oz
Bottle 05 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 06 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 07 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 08 16 oz HNO3 Metals Plastic
Bottle 09 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 10 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 11 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 12 Cr+6 Preserved 250 Polyethylene
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 17 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 18 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 19 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122859) Volume: 10.00000 mL <== Derived from 11 (5 ml)
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Bottle 26 BOD Titration Beaker A (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1122995) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1123008) Volume: 6.00000 mL <== Derived from 14 (6 ml)
Bottle 30 Prepared Bottle: Mercury Preparation for Metals (Batch 1123013) Volume: 50.00000 mL <== Derived from 08 (25 ml)
Bottle 31 Prepared Bottle: ICP Preparation for Metals (Batch 1123060) Volume: 50.00000 mL <== Derived from 08 (50 ml)
Bottle 32 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1123138) Volume: 10.00000 mL <== Derived from 03 (1025 ml)
Bottle 33 Prepared Bottle: 2 mL Autosampler Vial (Batch 1123370) Volume: 1.00000 mL <== Derived from 04 (939 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1124341) Volume: 1.00000 mL <== Derived from 07 (862 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 2320 B-2011	01	1123173	06/10/2024	1123173	06/10/2024
SM 5210 B-2016	01	1122943	06/13/2024	1122943	06/13/2024
SM 5210 B-2016 (TCMP Inhibitor)	01	1122944	06/13/2024	1122944	06/13/2024
SM 4500-CN ⁻ G-2016			06/19/2024		06/19/2024

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Sample	Sample ID	Taken	Time	Received
2305623	WW - Retention Pond	06/06/2024	13:30:00	06/07/2024

Bottle 01 Polyethylene 1/2 gal (White)
Bottle 02 Polyethylene Quart
Bottle 03 Amber 32 Oz
Bottle 04 Amber 32 Oz
Bottle 05 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 06 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 07 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 08 16 oz HNO3 Metals Plastic
Bottle 09 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 10 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 11 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 12 Cr+6 Preserved 250 Polyethylene
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 17 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 18 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
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Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122859) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 21 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 22 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 24 BOD Titration Beaker A (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 25 BOD Analytical Beaker B (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 26 BOD Titration Beaker A (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1122995) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1123008) Volume: 6.00000 mL <== Derived from 14 (6 ml)
Bottle 30 Prepared Bottle: Mercury Preparation for Metals (Batch 1123013) Volume: 50.00000 mL <== Derived from 08 (25 ml)
Bottle 31 Prepared Bottle: ICP Preparation for Metals (Batch 1123060) Volume: 50.00000 mL <== Derived from 08 (50 ml)
Bottle 32 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1123138) Volume: 10.00000 mL <== Derived from 03 (1025 ml)
Bottle 33 Prepared Bottle: 2 mL Autosampler Vial (Batch 1123370) Volume: 1.00000 mL <== Derived from 04 (939 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1124341) Volume: 1.00000 mL <== Derived from 07 (862 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 4500-CN ⁻ G-2016	21	1122879	06/07/2024	1123107	06/10/2024
SM 4500-CN ⁻ E-2016	20	1122859	06/07/2024	1123105	06/10/2024
SM 5220 D-2011	14	1123591	06/12/2024	1123591	06/12/2024
SM 4500-CI G-2011		1122809	06/06/2024	1122809	06/06/2024

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Sample	Sample ID	Taken	Time	Received
2305623	WW - Retention Pond	06/06/2024	13:30:00	06/07/2024

- Bottle 01 Polyethylene 1/2 gal (White)
Bottle 02 Polyethylene Quart
Bottle 03 Amber 32 Oz
Bottle 04 Amber 32 Oz
Bottle 05 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 06 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 07 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 08 16 oz HNO3 Metals Plastic
Bottle 09 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 10 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 11 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 12 Cr+6 Preserved 250 Polyethylene
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 17 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 18 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 19 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122859) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 21 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 22 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 24 BOD Titration Beaker A (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 25 BOD Analytical Beaker B (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 26 BOD Titration Beaker A (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1122995) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1123008) Volume: 6.00000 mL <== Derived from 14 (6 ml)
Bottle 30 Prepared Bottle: Mercury Preparation for Metals (Batch 1123013) Volume: 50.00000 mL <== Derived from 08 (25 ml)
Bottle 31 Prepared Bottle: ICP Preparation for Metals (Batch 1123060) Volume: 50.00000 mL <== Derived from 08 (50 ml)
Bottle 32 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1123138) Volume: 10.00000 mL <== Derived from 03 (1025 ml)
Bottle 33 Prepared Bottle: 2 mL Autosampler Vial (Batch 1123370) Volume: 1.00000 mL <== Derived from 04 (939 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1124341) Volume: 1.00000 mL <== Derived from 07 (862 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
Calculation			06/19/2024		06/19/2024
SM 3500-Cr B-2011	12	1122852	06/07/2024	1122852	06/07/2024
SM 3500-Cr B-2011		1122789	06/06/2024	1122789	06/06/2024
SM 4500-O G-2016		1122811	06/06/2024	1122811	06/06/2024

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Sample	Sample ID	Taken	Time	Received
2305623	WW - Retention Pond	06/06/2024	13:30:00	06/07/2024

- Bottle 01 Polyethylene 1/2 gal (White)
Bottle 02 Polyethylene Quart
Bottle 03 Amber 32 Oz
Bottle 04 Amber 32 Oz
Bottle 05 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 06 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 07 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 08 16 oz HNO3 Metals Plastic
Bottle 09 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 10 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 11 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 12 Cr+6 Preserved 250 Polyethylene
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 17 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 18 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 19 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122859) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 21 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 22 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
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Bottle 24 BOD Titration Beaker A (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
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Bottle 26 BOD Titration Beaker A (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1122995) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1123008) Volume: 6.00000 mL <== Derived from 14 (6 ml)
Bottle 30 Prepared Bottle: Mercury Preparation for Metals (Batch 1123013) Volume: 50.00000 mL <== Derived from 08 (25 ml)
Bottle 31 Prepared Bottle: ICP Preparation for Metals (Batch 1123060) Volume: 50.00000 mL <== Derived from 08 (50 ml)
Bottle 32 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1123138) Volume: 10.00000 mL <== Derived from 03 (1025 ml)
Bottle 33 Prepared Bottle: 2 mL Autosampler Vial (Batch 1123370) Volume: 1.00000 mL <== Derived from 04 (939 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1124341) Volume: 1.00000 mL <== Derived from 07 (862 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 350.1 2	29	1123008	06/10/2024	1124055	06/14/2024
EPA 351.2 minus EPA 350.1			06/19/2024		06/19/2024
SM 2540 C-2015	01	1123493	06/11/2024	1123493	06/11/2024
EPA 351.2 2	28	1122995	06/10/2024	1123329	06/11/2024

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Bottle 02 Polyethylene Quart
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Bottle 04 Amber 32 Oz
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Bottle 06 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 07 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 08 16 oz HNO3 Metals Plastic
Bottle 09 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
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Bottle 32 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1123138) Volume: 10.00000 mL <== Derived from 03 (1025 ml)
Bottle 33 Prepared Bottle: 2 mL Autosampler Vial (Batch 1123370) Volume: 1.00000 mL <== Derived from 04 (939 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1124341) Volume: 1.00000 mL <== Derived from 07 (862 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 5310 C-2014	09	1124581	06/18/2024	1124581	06/18/2024
SM 4500-P E-2011	13	1123135	06/10/2024	1123135	06/10/2024
SM 2540 D-2015	01	1123475	06/11/2024	1123475	06/11/2024
SM 2130 B-2011	02	1123697	06/11/2024	1123697	06/11/2024

Email: Kilgore.ProjectManagement@spllabs.com

SAMPLE CROSS REFERENCE

Project

1106094

SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

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6/26/2024

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Sample	Sample ID	Taken	Time	Received
2305623	WW - Retention Pond	06/06/2024	13:30:00	06/07/2024

- Bottle 01 Polyethylene 1/2 gal (White)
Bottle 02 Polyethylene Quart
Bottle 03 Amber 32 Oz
Bottle 04 Amber 32 Oz
Bottle 05 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 06 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 07 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 08 16 oz HNO3 Metals Plastic
Bottle 09 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 10 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 11 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 12 Cr+6 Preserved 250 Polyethylene
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 17 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 18 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 19 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122859) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 21 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 22 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 24 BOD Titration Beaker A (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 25 BOD Analytical Beaker B (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 26 BOD Titration Beaker A (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1122995) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1123008) Volume: 6.00000 mL <== Derived from 14 (6 ml)
Bottle 30 Prepared Bottle: Mercury Preparation for Metals (Batch 1123013) Volume: 50.00000 mL <== Derived from 08 (25 ml)
Bottle 31 Prepared Bottle: ICP Preparation for Metals (Batch 1123060) Volume: 50.00000 mL <== Derived from 08 (50 ml)
Bottle 32 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1123138) Volume: 10.00000 mL <== Derived from 03 (1025 ml)
Bottle 33 Prepared Bottle: 2 mL Autosampler Vial (Batch 1123370) Volume: 1.00000 mL <== Derived from 04 (939 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1124341) Volume: 1.00000 mL <== Derived from 07 (862 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 2550 B - 2010		1123056	06/06/2024	1123056	06/06/2024
EPA 1664B	05	1123989	06/14/2024	1123989	06/14/2024
SM 4500-H+ B-2011		1122812	06/06/2024	1122812	06/06/2024

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SPAC-R

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SPACEX
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Space Exploration Technologies
1 Rocket Rd
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RESULTS

Sample Results

2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACEX
13:30:00

PO: 2305623-5

Prepared: 06/24/2024 15:50:00 Analyzed 06/24/2024 15:50:00 WJP

Parameter	Results	Units	RL	Flags	CAS	Bottle
Check Limits	Completed					

Prepared: 1122810 06/06/2024 13:30:00 Analyzed 1122810 06/06/2024 13:30:00 RDL

Parameter	Results	Units	RL	Flags	CAS	Bottle
Field Cl2 Check for CNa	NEG					

Prepared: 1122813 06/06/2024 13:30:00 Analyzed 1122813 06/06/2024 13:30:00 RDL

Parameter	Results	Units	RL	Flags	CAS	Bottle
Field Sulfide Check for CNa	NEG	mg/L				

ASTM D7065-11 Prepared: 1124341 06/17/2024 14:40:00 Analyzed 1124948 06/19/2024 19:32:00 DWL

Parameter	Results	Units	RL	Flags	CAS	Bottle
Nonylphenol	<34.8	ug/L	34.8	SD	25154-52-3	34

Calculation Prepared: 06/19/2024 11:10:05 Calculated 06/19/2024 11:10:05 CAL

Parameter	Results	Units	RL	Flags	CAS	Bottle
Trivalent Chromium	<0.003	mg/L	0.003		16065-83-1	

EPA 1664B Prepared: 1123989 06/14/2024 11:25:00 Analyzed 1123989 06/14/2024 11:25:00 RC1

Parameter	Results	Units	RL	Flags	CAS	Bottle
Oil and Grease (HEM)	<4.60	mg/L	4.60			05

EPA 200.7 4.4 Prepared: 1123060 06/10/2024 07:00:00 Analyzed 1123677 06/12/2024 12:42:00 KBI

Parameter	Results	Units	RL	Flags	CAS	Bottle
Calcium	72.7	mg/L	0.500		7440-70-2	31



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SPAC-R

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SPACE X
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Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
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2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACE X
13:30:00

PO: 2305623-5

EPA 200.7 4.4 Prepared: 1123060 06/10/2024 07:00:00 Analyzed 1123677 06/12/2024 12:42:00 KB1

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Iron, Total	0.199	mg/L	0.025		7439-89-6	31

EPA 200.8 5.4 Prepared: 1123060 06/10/2024 07:00:00 Analyzed 1123439 06/11/2024 15:17:00 JC2

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Antimony, Total	0.00112	mg/L	0.003	J	7440-36-0	31
NELAC	Barium, Total	0.085	mg/L	0.005		7440-39-3	31
NELAC	Lead, Total	<0.0005	mg/L	0.0005		7439-92-1	31
NELAC	Manganese, Total	0.0163	mg/L	0.001		7439-96-5	31
NELAC	Selenium, Total	<0.00294	mg/L	0.00294		7782-49-2	31

EPA 200.8 5.4 Prepared: 1123060 06/10/2024 07:00:00 Analyzed 1124795 06/19/2024 11:43:00 JC2

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Thallium, Total	0.000616	mg/L	0.0005		7440-28-0	31

EPA 200.8 5.4 Prepared: 1123138 06/10/2024 14:30:00 Analyzed 1123222 06/10/2024 18:53:00 JC2

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Aluminum, Total	0.00615	mg/L	0.0000167		7429-90-5	32
NELAC	Arsenic, Total	0.0000169	mg/L	0.00000976		7440-38-2	32
NELAC	Beryllium, Total	<0.00000136	mg/L	0.00000136		7440-41-7	32
NELAC	Cadmium, Total	<0.00000065	mg/L	0.00000065		7440-43-9	32
NELAC	Chromium, Total	0.000282	mg/L	0.00000976		7440-47-3	32
NELAC	Copper, Total	0.0000747	mg/L	0.0000151		7440-50-8	32
NELAC	Nickel, Total	0.0000224	mg/L	0.0000109		7440-02-0	32
NELAC	Silver, Total	<0.0000022	mg/L	0.0000022		7440-22-4	32
NELAC	Zinc, Total	0.0043	mg/L	0.00000976		7440-66-6	32

EPA 245.1 3 Prepared: 1123013 06/10/2024 06:30:00 Analyzed 1123073 06/10/2024 11:34:00 KB1

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Mercury, Total	0.139	ug/L	0.200	J	7439-97-6	30

EPA 300.0 2.1 Prepared: 1123092 06/07/2024 16:05:00 Analyzed 1123092 06/07/2024 16:05:00 NAZ

	Parameter	Results	Units	RL	Flags	CAS	Bottle



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SPAC-R

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SPACEX
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Project
1106094

Printed: 06/26/2024

2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACEX
13:30:00

PO: 2305623-5

EPA 300.0 2.1 Prepared: 1123092 06/07/2024 16:05:00 Analyzed 1123092 06/07/2024 16:05:00 NAZ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Chloride	197	mg/L	3.00			01
NELAC	Fluoride	1.24	mg/L	1.00			01
NELAC	Nitrate-Nitrogen Total	1.20	mg/L	0.226		14797-55-8	01

EPA 300.0 2.1 Prepared: 1124447 06/18/2024 03:37:00 Analyzed 1124447 06/18/2024 03:37:00 NAZ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Sulfate	281	mg/L	30.0			01

EPA 350.1 2 Prepared: 1123008 06/10/2024 08:49:19 Analyzed 1124055 06/14/2024 08:53:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Ammonia Nitrogen	0.211	mg/L	0.020			29

EPA 351.2 2 Prepared: 1122995 06/10/2024 08:02:43 Analyzed 1123329 06/11/2024 10:29:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Kjeldahl Nitrogen	0.372	mg/L	0.050		7727-37-9	28

EPA 351.2 minus EPA 350.1 Prepared: 06/19/2024 11:10:05 Calculated 06/19/2024 11:10:05 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
z	Nitrogen, Total Organic (as N)	0.161	mg/L	0.050			

EPA 608.3 Prepared: 1123138 06/10/2024 14:30:00 Analyzed 1123853 06/13/2024 04:55:00 KAP

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	PCB-1016	<0.197	ug/L	0.197		12674-11-2	32
NELAC	PCB-1221	<0.195	ug/L	0.195		11104-28-2	32
NELAC	PCB-1232	<0.195	ug/L	0.195		11141-16-5	32
NELAC	PCB-1242	<0.195	ug/L	0.195		53469-21-9	32
NELAC	PCB-1248	<0.195	ug/L	0.195		12672-29-6	32
NELAC	PCB-1254	<0.195	ug/L	0.195		11097-69-1	32
NELAC	PCB-1260	<0.195	ug/L	0.195		11096-82-5	32
NELAC	PCB-1262	<0.195	ug/L	0.195		37324-23-5	32
NELAC	PCB-1268	<0.195	ug/L	0.195		11100-14-4	32



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SPAC-R

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Brownsville, TX 78521

Project
1106094

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2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACE X
13:30:00

PO: 2305623-5

EPA 624.1 Prepared: 1123030 06/07/2024 16:19:00 Analyzed 1123030 06/07/2024 16:19:00 MRI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	1,1,1-Trichloroethane	<1.00	ug/L	1.00		71-55-6	16
NELAC	1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00		79-34-5	16
NELAC	1,1,2-Trichloroethane	<1.00	ug/L	1.00		79-00-5	16
NELAC	1,1-Dichloroethane	<1.00	ug/L	1.00		75-34-3	16
NELAC	1,1-Dichloroethylene	<1.00	ug/L	1.00		75-35-4	16
NELAC	1,2-Dibromoethane (EDB)	<1.00	ug/L	1.00		106-93-4	16
NELAC	1,2-Dichloroethane	<1.00	ug/L	1.00		107-06-2	16
NELAC	1,2-Dichloropropane	<1.00	ug/L	1.00		78-87-5	16
NELAC	2-Chloroethylvinyl ether	<1.00	ug/L	1.00		110-75-8	16
NELAC	Benzene	<1.00	ug/L	1.00		71-43-2	16
NELAC	Bromodichloromethane	<1.00	ug/L	1.00		75-27-4	16
NELAC	Bromoform	<1.00	ug/L	1.00		75-25-2	16
NELAC	Bromomethane (Methyl Bromi	<1.00	ug/L	1.00		74-83-9	16
NELAC	Carbon Tetrachloride	<1.00	ug/L	1.00		56-23-5	16
NELAC	Chlorobenzene	<1.00	ug/L	1.00		108-90-7	16
NELAC	Chloroethane	<1.12	ug/L	1.12		75-00-3	16
NELAC	Chloroform	<1.00	ug/L	1.00		67-66-3	16
NELAC	Chloromethane (Methyl Chloride)	<1.00	ug/L	1.00		74-87-3	16
NELAC	cis-1,3-Dichloropropene	<1.00	ug/L	1.00		10061-01-5	16
NELAC	Dibromochloromethane	<1.00	ug/L	1.00		124-48-1	16
NELAC	Dichloromethane	<1.02	ug/L	1.02		75-09-2	16
NELAC	Ethylbenzene	<1.00	ug/L	1.00		100-41-4	16
NELAC	m-Dichlorobenzene (1,3-DCB)	<1.00	ug/L	1.00		541-73-1	16
NELAC	Methyl ethyl ketone (Butanone)	<1.00	ug/L	1.00		78-93-3	16
NELAC	o-Dichlorobenzene (1,2-DCB)	<1.00	ug/L	1.00		95-50-1	16
NELAC	p-Dichlorobenzene (1,4-DCB)	<1.00	ug/L	1.00		106-46-7	16
NELAC	Tetrachloroethylene	<1.00	ug/L	1.00		127-18-4	16
NELAC	Toluene	<1.00	ug/L	1.00		108-88-3	16
NELAC	trans-1,2-Dichloroethylene	<1.00	ug/L	1.00		156-60-5	16
NELAC	trans-1,3-Dichloropropene	<1.00	ug/L	1.00		10061-02-6	16
NELAC	Trichloroethylene	<1.00	ug/L	1.00		79-01-6	16
NELAC	Vinyl chloride	<1.00	ug/L	1.00		75-01-4	16

EPA 624.1 Prepared: 1123030 06/19/2024 11:10:05 Calculated 1123030 06/19/2024 11:10:05 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Trihalomethanes	<0.001	mg/L	0.001			16



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SPAC-R

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SPACE X
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1106094

Printed: 06/26/2024

2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACE X
13:30:00

PO: 2305623-5

EPA 624.1 Prepared: 1123033 06/07/2024 15:11:00 Analyzed 1123033 06/07/2024 15:11:00 MRI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Acrolein	<4.00	ug/L	4.00	X	107-02-8	19
NELAC	Acrylonitrile	<1.00	ug/L	1.00		107-13-1	19

EPA 625.1 Prepared: 1123370 06/11/2024 15:15:00 Analyzed 1125008 06/18/2024 18:25:00 PMI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	1,2,4,5-Tetrachlorobenzene	<1.10	ug/L	1.10		95-94-3	33
NELAC	1,2,4-Trichlorobenzene	<1.06	ug/L	1.06		120-82-1	33
NELAC	1,2-Dichlorobenzene	<5.32	ug/L	5.32		95-50-1	33
NELAC	1,2-DPH (as azobenzene)	<1.06	ug/L	1.06		122-66-7	33
NELAC	1,3-Dichlorobenzene	<5.32	ug/L	5.32		541-73-1	33
NELAC	1,4-Dichlorobenzene	<5.32	ug/L	5.32		106-46-7	33
NELAC	2,4,5-Trichlorophenol	<5.32	ug/L	5.32		95-95-4	33
NELAC	2,4,6-Trichlorophenol	<2.13	ug/L	2.13		88-06-2	33
NELAC	2,4-Dichlorophenol	<1.06	ug/L	1.06		120-83-2	33
NELAC	2,4-Dimethylphenol	<1.06	ug/L	1.06		105-67-9	33
NELAC	2,4-Dinitrophenol	<2.13	ug/L	2.13		51-28-5	33
NELAC	2,4-Dinitrotoluene	<2.13	ug/L	2.13		121-14-2	33
NELAC	2,6-Dinitrotoluene	<2.13	ug/L	2.13		606-20-2	33
NELAC	2-Chloronaphthalene	<1.06	ug/L	1.06		91-58-7	33
NELAC	2-Chlorophenol	<1.06	ug/L	1.06		95-57-8	33
NELAC	2-Methylphenol (o-Cresol)	<10.0	ug/L	10.0		95-48-7	33
NELAC	2-Nitrophenol	<1.06	ug/L	1.06		88-75-5	33
NELAC	3&4-Methylphenol (m&p-Cresol)	<8.52	ug/L	8.52		MEPH34	33
NELAC	3,3'-Dichlorobenzidine	<2.13	ug/L	2.13		91-94-1	33
NELAC	4,6-Dinitro-2-methylphenol	<2.13	ug/L	2.13		534-52-1	33
NELAC	4-Bromophenyl phenyl ether	<1.06	ug/L	1.06		101-55-3	33
NELAC	4-Chlorophenyl phenyl ethe	<1.06	ug/L	1.06		7005-72-3	33
NELAC	4-Nitrophenol	<1.06	ug/L	1.06		100-02-7	33
NELAC	Acenaphthene	<1.06	ug/L	1.06		83-32-9	33
NELAC	Acenaphthylene	<1.06	ug/L	1.06		208-96-8	33
z	Aniline	<2.63	ug/L	2.63	S	62-53-3	33
NELAC	Anthracene	<1.06	ug/L	1.06		120-12-7	33
NELAC	Benzidine	<1.60	ug/L	1.60	D	92-87-5	33
NELAC	Benzo(a)anthracene	<1.06	ug/L	1.06		56-55-3	33
NELAC	Benzo(a)pyrene	<1.06	ug/L	1.06		50-32-8	33



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SPAC-R

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SPACE X
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1106094

Printed: 06/26/2024

2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACE X
13:30:00

PO: 2305623-5

EPA 625.1 Prepared: 1123370 06/11/2024 15:15:00 Analyzed 1125008 06/18/2024 18:25:00 PMI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Benzo(b)fluoranthene	<1.06	ug/L	1.06		205-99-2	33
NELAC	Benzo(ghi)perylene	<1.06	ug/L	1.06		191-24-2	33
NELAC	Benzo(k)fluoranthene	<1.06	ug/L	1.06		207-08-9	33
NELAC	Benzyl Butyl phthalate	<7.99	ug/L	7.99		85-68-7	33
NELAC	Bis(2-chloroethoxy)methane	<1.06	ug/L	1.06		111-91-1	33
NELAC	Bis(2-chloroethyl)ether	<1.06	ug/L	1.06		111-44-4	33
NELAC	Bis(2-chloroisopropyl)ether	<1.06	ug/L	1.06		108-60-1	33
NELAC	Bis(2-ethylhexyl)phthalate	<7.99	ug/L	7.99		117-81-7	33
NELAC	Chrysene (Benzo(a)phenanthrene)	<1.06	ug/L	1.06		218-01-9	33
NELAC	Dibenz(a,h)anthracene	<1.06	ug/L	1.06		53-70-3	33
NELAC	Diethyl phthalate	<6.07	ug/L	6.07		84-66-2	33
NELAC	Dimethyl phthalate	<5.11	ug/L	5.11		131-11-3	33
NELAC	Di-n-butylphthalate	<7.99	ug/L	7.99		84-74-2	33
NELAC	Di-n-octylphthalate	<2.13	ug/L	2.13	X	117-84-0	33
NELAC	Fluoranthene(Benzo(j,k)fluorene)	<1.06	ug/L	1.06		206-44-0	33
NELAC	Fluorene	<1.06	ug/L	1.06		86-73-7	33
NELAC	Hexachlorobenzene	<1.06	ug/L	1.06		118-74-1	33
NELAC	Hexachlorobutadiene	<1.10	ug/L	1.10		87-68-3	33
NELAC	Hexachlorocyclopentadiene	<1.06	ug/L	1.06		77-47-4	33
NELAC	Hexachloroethane	<2.13	ug/L	2.13		67-72-1	33
NELAC	Indeno(1,2,3-cd)pyrene	<1.06	ug/L	1.06		193-39-5	33
NELAC	Isophorone	<1.06	ug/L	1.06		78-59-1	33
NELAC	Naphthalene	<1.06	ug/L	1.06		91-20-3	33
NELAC	Nitrobenzene	<1.06	ug/L	1.06		98-95-3	33
NELAC	n-Nitrosodiethylamine	<1.06	ug/L	1.06		55-18-5	33
NELAC	N-Nitrosodimethylamine	<1.06	ug/L	1.06		62-75-9	33
NELAC	n-Nitroso-di-n-butylamine	<1.06	ug/L	1.06		924-16-3	33
NELAC	N-Nitrosodi-n-propylamine	<1.06	ug/L	1.06		621-64-7	33
NELAC	N-Nitrosodiphenylamine (as DPA	<1.06	ug/L	1.06		86-30-6	33
NELAC	p-Chloro-m-Cresol (4-Chloro-3-me	<1.06	ug/L	1.06		59-50-7	33
NELAC	Pentachlorobenzene	<1.06	ug/L	1.06		608-93-5	33
NELAC	Pentachlorophenol	<5.00	ug/L	5.00		87-86-5	33
NELAC	Phenanthrene	<1.06	ug/L	1.06		85-01-8	33
NELAC	Phenol	<1.06	ug/L	1.06		108-95-2	33
NELAC	Pyrene	<1.06	ug/L	1.06		129-00-0	33
NELAC	Pyridine	<1.44	ug/L	1.44	X	110-86-1	33



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SPACE X
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1106094

Printed: 06/26/2024

2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACE X
13:30:00

PO: 2305623-5

EPA 625.1 Prepared: 1123370 06/11/2024 15:15:00 Calculated 1125008 06/21/2024 15:33:09 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cresols Total	<8.52	ug/L	8.52		1319-77-3, etc.	33

SM 2130 B-2011 Prepared: 1123697 06/11/2024 15:25:00 Analyzed 1123697 06/11/2024 15:25:00 TRC

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Turbidity	3.04	NTU	0.300	H		02

SM 2320 B-2011 Prepared: 1123173 06/10/2024 11:06:00 Analyzed 1123173 06/10/2024 11:06:00 KNI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Alkalinity (as CaCO3)	106	mg/L	1.00			01

SM 2540 C-2015 Prepared: 1123493 06/11/2024 08:00:00 Analyzed 1123493 06/11/2024 08:00:00 JMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Dissolved Solids	800	mg/L	50.0			01

SM 2540 D-2015 Prepared: 1123475 06/11/2024 14:00:00 Analyzed 1123475 06/11/2024 14:00:00 ADR

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Suspended Solids	7.10	mg/L	2.00			01

SM 2550 B - 2010 Prepared: 1123056 06/06/2024 13:30:00 Analyzed 1123056 06/06/2024 13:30:00 RDL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Temperature (onsite)	38	Degrees C	1			

SM 3500-Cr B-2011 Prepared: 1122789 06/06/2024 13:30:00 Analyzed 1122789 06/06/2024 13:30:00 RDL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Hex Cr, Field Preservation	Preserved	ug/L	3		18540-29-9	

SM 3500-Cr B-2011 Prepared: 1122852 06/07/2024 11:45:00 Analyzed 1122852 06/07/2024 11:45:00 ALB

	Parameter	Results	Units	RL	Flags	CAS	Bottle



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SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1106094

Printed: 06/26/2024

2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACEX
13:30:00

PO: 2305623-5

SM 3500-Cr B-2011 Prepared: 1122852 06/07/2024 11:45:00 Analyzed 1122852 06/07/2024 11:45:00 ALB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Hexavalent Chromium	25.9	ug/L	3.00		18540-29-9	12

SM 4500-Cl G-2011 Prepared: 1122809 06/06/2024 13:30:00 Analyzed 1122809 06/06/2024 13:30:00 RDL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cl2 Res.,Total(Onsite)Spec Mid	0.00	mg/L	0.05			

SM 4500-CN⁻E-2016 Prepared: 1122859 06/07/2024 13:58:40 Analyzed 1123105 06/10/2024 09:44:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cyanide, total	0.0034	mg/L	0.005	J		20

SM 4500-CN⁻G-2016 Prepared: 06/19/2024 11:10:05 Calculated 06/19/2024 11:10:05 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cyanide - Available/Amenable	0.00102	mg/L	0.005	J		

SM 4500-CN⁻G-2016 Prepared: 1122879 06/07/2024 15:00:00 Analyzed 1123107 06/10/2024 09:44:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cyanide After Chlorination	<0.00238	mg/L	0.00238			21

SM 4500-H+ B-2011 Prepared: 1122812 06/06/2024 13:30:00 Analyzed 1122812 06/06/2024 13:30:00 RDL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	pH (Onsite)	8.6	SU				

SM 4500-O G-2016 Prepared: 1122811 06/06/2024 13:30:00 Analyzed 1122811 06/06/2024 13:30:00 RDL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Dissolved Oxygen Onsite	7.1	mg/L	1.0			

SM 4500-P E-2011 Prepared: 1123135 06/10/2024 09:45:00 Analyzed 1123135 06/10/2024 09:45:00 LR3

	Parameter	Results	Units	RL	Flags	CAS	Bottle



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Brownsville, TX 78521

Project
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Printed: 06/26/2024

2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACE X
13:30:00

PO: 2305623-5

SM 4500-P E-2011 Prepared: 1123135 06/10/2024 09:45:00 Analyzed 1123135 06/10/2024 09:45:00 LR3

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Phosphorus (as P), total	0.017	mg/L	0.030		7723-14-0	13

SM 5210 B-2016 Prepared: 1122943 06/08/2024 Analyzed 1122943 06/13/2024 14:30:55 JW1

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Biochemical Oxygen Demand (BOD5)	3.56	mg/L	2.00		1026-3	01

SM 5210 B-2016 (TCMP Inhibitor) Prepared: 1122944 06/08/2024 Analyzed 1122944 06/13/2024 14:06:55 JW1

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	BOD Carbonaceous	<2.00	mg/L	2.00			01

SM 5220 D-2011 Prepared: 1123591 06/12/2024 14:00:00 Analyzed 1123591 06/12/2024 14:00:00 SRJ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Chemical Oxygen Demand	<20.0	mg/L	20.0			14

SM 5310 C-2014 Prepared: 1124581 06/18/2024 17:34:00 Analyzed 1124581 06/18/2024 17:34:00 MAG

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Organic Carbon	3.61	mg/L	0.500			09

Sample Preparation

2305623 WW - Retention Pond

Received: 06/07/2024

2305623-5

06/06/2024

Prepared: 12/31/1899 12:11:02 Calculated 12:11:02 CAL

Environmental Fee (per Project)

Verified



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SPACE X
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Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
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Printed: 06/26/2024

2305623 WW - Retention Pond

Received: 06/07/2024
2305623-5

06/06/2024

ASTM D7065-11		Prepared: 1124341	06/17/2024	14:40:00	Analyzed 1124948	06/19/2024	19:32:00	DWL
z	Nonyl Phenol Expansion	Entered						34
EPA 200.2 2.8		Prepared: 1123060	06/10/2024	07:00:00	Analyzed 1123060	06/10/2024	07:00:00	HLT
z	Liquid Metals Digestion	50/50	ml					08
EPA 245.1 3		Prepared: 1123013	06/10/2024	06:30:00	Analyzed 1123013	06/10/2024	06:30:00	HLT
NELAC	Mercury Liquid Metals Digestion	50/25	ml					08
EPA 350.2, Rev. 2.0		Prepared: 1123008	06/10/2024	08:49:19	Analyzed 1123008	06/10/2024	08:49:19	MEG
NELAC	Ammonia Distillation	6/6	ml					14
EPA 351.2, Rev 2.0		Prepared: 1122995	06/10/2024	08:02:43	Analyzed 1122995	06/10/2024	08:02:43	MEG
NELAC	TKN Block Digestion	20/20	ml					14
EPA 608.3		Prepared: 1123138	06/10/2024	14:30:00	Analyzed 1123138	06/10/2024	14:30:00	CRS
PCB Liq-Liq Extr. W/Hex Exch.		10/1025	ml					03
EPA 608.3		Prepared: 1123138	06/10/2024	14:30:00	Analyzed 1123853	06/13/2024	04:55:00	KAP
NELAC	Polychlorinated Biphenyls	Entered						32
EPA 624.1		Prepared: 1123030	06/07/2024	16:19:00	Analyzed 1123030	06/07/2024	16:19:00	MRI



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2305623 WW - Retention Pond

Received: 06/07/2024

2305623-5

06/06/2024

EPA 624.1 Prepared: 1123030 06/07/2024 16:19:00 Analyzed 1123030 06/07/2024 16:19:00 MRI

Table D-1/D-2 Volatile Expansion

Entered

16

EPA 624.1 Prepared: 1123033 06/07/2024 15:11:00 Analyzed 1123033 06/07/2024 15:11:00 MRI

Acrolein/Acrylonitrile Exp.

Entered

19

EPA 625.1 Prepared: 1123370 06/11/2024 15:15:00 Analyzed 1123370 06/11/2024 15:15:00 CRS

Liquid-Liquid Extraction, BNA

1/939

ml

04

EPA 625.1 Prepared: 1123370 06/11/2024 15:15:00 Analyzed 1125008 06/18/2024 18:25:00 PMI

Table D-1/ D-2 Semivolatiles Exp

Entered

33

EPA 625.1 Prepared: 1124341 06/17/2024 14:40:00 Analyzed 1124341 06/17/2024 14:40:00 MCC

Nonylphenol Liq-Liq Extract

1/862

ml

07

SM 2540 C-2015 Prepared: 1123231 06/11/2024 08:00:00 Analyzed 1123231 06/11/2024 08:00:00 JMB

Total Dissolved Solids Started

Started

SM 2540 D-2011 Prepared: 1123240 06/11/2024 14:00:00 Analyzed 1123240 06/11/2024 14:00:00 ADR

TSS Set Started

Started

SM 4500-CN⁻ C-2016 Prepared: 1122859 06/07/2024 13:58:40 Analyzed 1122859 06/07/2024 13:58:40 SRJ

Cyanide Distillation

10/5

ml

11



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 Space Exploration Technologies
 1 Rocket Rd
 Brownsville, TX 78521

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Printed: 06/26/2024

2305623 WW - Retention Pond

Received: 06/07/2024
 2305623-5

06/06/2024

SM 4500-CN⁻ C-2016 Prepared: 1122879 06/07/2024 15:00:00 Analyzed 1122879 06/07/2024 15:00:00 SRJ

NELAC CN Dist After Chlorination 10/5 ml 11

SM 5210 B-2016 Prepared: 1122943 06/08/2024 Analyzed 1122943 06/08/2024 06:36:35 JW1

NELAC BOD Set Started Started

SM 5210 B-2016 (TCMP Inhibitor) Prepared: 1122944 06/08/2024 Analyzed 1122944 06/08/2024 06:36:35 JW1

NELAC BODc Set Started Started

Qualifiers:

J - Analyte detected below quantitation limit D - Duplicate RPD was higher than expected
 H - Sample started outside recommended holding time X - Standard reads higher than desired.
 S - Standard reads lower than desired

We report results on an As Received (or Wet) basis unless marked Dry Weight.

Unless otherwise noted, testing was performed at SPL, Inc.- Kilgore laboratory which holds International, Federal, and state accreditations. Please see our Websites for details.

(N)ELAC - Covered in our NELAC scope of accreditation

z -- Not covered by our NELAC scope of accreditation

These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of SPL Kilgore. Unless otherwise specified, these test results meet the requirements of NELAC.

RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.



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2600 Dudley Rd. Kilgore, Texas 75662
24 Waterway Avenue, Suite 375 The Woodlands, TX 77380
Office: 903-984-0551 * Fax: 903-984-5914



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SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1106094

Printed: 06/26/2024

Bill Peery, MS, VP Technical Services



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QUALITY CONTROL



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SPAC-R

SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1106094

Printed 06/26/2024

Analytical Set **1122943**

SM 5210 B-2016

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Biochemical Oxygen Demand (BOD5)	1122943	0.2	0.200	0.500	mg/L	126419820
Biochemical Oxygen Demand (BOD5)	1122943	0.3	0.200	0.500	mg/L	126419872
Biochemical Oxygen Demand (BOD5)	1122943	0.2	0.200	0.500	mg/L	126420032

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Biochemical Oxygen Demand (BOD5)	2305504	15.8	14.3	mg/L	9.97	30.0
Biochemical Oxygen Demand (BOD5)	2305617	151	164	mg/L	8.25	30.0
Biochemical Oxygen Demand (BOD5)	2305721	263	265	mg/L	0.758	30.0
Biochemical Oxygen Demand (BOD5)	2305836	6.55	6.91	mg/L	5.35	30.0
Biochemical Oxygen Demand (BOD5)	2305924	5.37	5.73	mg/L	6.49	30.0

Seed Drop

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Biochemical Oxygen Demand (BOD5)	1122943	1.15	0.200	0.500	mg/L	126419822
Biochemical Oxygen Demand (BOD5)	1122943	1.01	0.200	0.500	mg/L	126419874
Biochemical Oxygen Demand (BOD5)	1122943	1.07	0.200	0.500	mg/L	126420034

Standard

Parameter	Sample	Reading	Known	Units	Recover%	Limits%	File
Biochemical Oxygen Demand (BOD5)	229	198	mg/L	116	83.7 - 116		126419823
Biochemical Oxygen Demand (BOD5)	227	198	mg/L	115	83.7 - 116		126419875
Biochemical Oxygen Demand (BOD5)	219	198	mg/L	111	83.7 - 116		126420035

Analytical Set **1122944**

SM 5210 B-2016 (TCMP Inhibitor)

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
BOD Carbonaceous	1122944	0.2	0.200	0.500	mg/L	126419906

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
BOD Carbonaceous	2305514	7.74	6.54	mg/L	16.8	30.0
BOD Carbonaceous	2305784	3.68	2.68	mg/L	31.4	30.0

Seed Drop

Parameter	PrepSet	Reading	MDL	MQL	Units	File
BOD Carbonaceous	1122944	1.29	0.200	0.500	mg/L	126419908

Standard

Parameter	Sample	Reading	Known	Units	Recover%	Limits%	File
BOD Carbonaceous	222	198	mg/L	112	83.7 - 116		126419909

Analytical Set **1123105**

SM 4500-CN⁻ E-2016

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File

Email: Kilgore.ProjectManagement@spllabs.com



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QUALITY CONTROL



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SPAC-R

SPACEEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
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Printed 06/26/2024

Blank											
<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>					
Cyanide, total	1122859	ND	0.00238	0.005	mg/L	126424626					
CCV											
<u>Parameter</u>		<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>				
Cyanide, total		0.513	0.500	mg/L	103	90.0 - 110	126424625				
Cyanide, total		0.516	0.500	mg/L	103	90.0 - 110	126424635				
Cyanide, total		0.512	0.500	mg/L	102	90.0 - 110	126424644				
Cyanide, total		0.514	0.500	mg/L	103	90.0 - 110	126424655				
Cyanide, total		0.549	0.500	mg/L	110	90.0 - 110	126424664				
Cyanide, total		0.518	0.500	mg/L	104	90.0 - 110	126424668				
Cyanide, total		0.516	0.500	mg/L	103	90.0 - 110	126424669				
Cyanide, total		0.518	0.500	mg/L	104	90.0 - 110	126424670				
Cyanide, total		0.519	0.500	mg/L	104	90.0 - 110	126424673				
Duplicate											
<u>Parameter</u>	<u>Sample</u>		<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>				
Cyanide, total	2305241		ND	ND	mg/L		20.0				
Cyanide, total	2305248		ND	ND	mg/L		20.0				
ICV											
<u>Parameter</u>		<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>				
Cyanide, total		0.200	0.200	mg/L	100	90.0 - 110	126424624				
LCS Dup											
<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>		<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Cyanide, total	1122859	0.362	0.361		0.400	90.0 - 110	90.5	90.2	mg/L	0.277	20.0
Mat. Spike											
<u>Parameter</u>	<u>Sample</u>	<u>Spike</u>	<u>Unknown</u>	<u>Known</u>	<u>Units</u>	<u>Recovery %</u>	<u>Limits %</u>	<u>File</u>			
Cyanide, total	2305241	0.356	ND	0.400	mg/L	89.0	90.0 - 110	126424631		*	
Cyanide, total	2305248	0.354	ND	0.400	mg/L	88.5	90.0 - 110	126424634		*	

Analytical Set 1123107

SM 4500-CN⁻ G-2016

Blank						
Parameter	PrepSet	Reading	MDL	MQL	Units	File
Cyanide After Chlorination	1122879	ND	0.00119	0.0025	mg/L	126424710
CCV						
Parameter	Reading	Known	Units	Recover%	Limits%	File
Cyanide After Chlorination	0.513	0.500	mg/L	103	90.0 - 110	126424705
Cyanide After Chlorination	0.516	0.500	mg/L	103	90.0 - 110	126424706
Cyanide After Chlorination	0.512	0.500	mg/L	102	90.0 - 110	126424707
Cyanide After Chlorination	0.514	0.500	mg/L	103	90.0 - 110	126424708
Cyanide After Chlorination	0.549	0.500	mg/L	110	90.0 - 110	126424709
Cyanide After Chlorination	0.518	0.500	mg/L	104	90.0 - 110	126424711
Cyanide After Chlorination	0.516	0.500	mg/L	103	90.0 - 110	126424718
Cyanide After Chlorination	0.518	0.500	mg/L	104	90.0 - 110	126424719

Email: Kilgore.ProjectManagement@spllabs.com



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QUALITY CONTROL



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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Cyanide After Chlorination	0.519	0.500	mg/L	104	90.0 - 110	126424720

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Cyanide After Chlorination	2305623	ND	ND	mg/L		20.0

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Cyanide After Chlorination	0.200	0.200	mg/L	100	90.0 - 110	126424704

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Cyanide After Chlorination	1122879	0.180	0.180	0.200	90.0 - 110	90.0	90.0	mg/L	0	20.0

Mat. Spike

Parameter	Sample	Spike	Unknown	Known	Units	Recovery %	Limits %	File
Cyanide After Chlorination	2305623	0.365	0.0014	0.400	mg/L	91.2	90.0 - 110	126424716

Analytical Set

1123329

EPA 351.2 2

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Kjeldahl Nitrogen	1122995	ND	0.00712	0.050	mg/L	126430743

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Kjeldahl Nitrogen	5.41	5.00	mg/L	108	90.0 - 110	126430734
Total Kjeldahl Nitrogen	5.38	5.00	mg/L	108	90.0 - 110	126430735
Total Kjeldahl Nitrogen	5.50	5.00	mg/L	110	90.0 - 110	126430739
Total Kjeldahl Nitrogen	5.36	5.00	mg/L	107	90.0 - 110	126430750
Total Kjeldahl Nitrogen	5.43	5.00	mg/L	109	90.0 - 110	126430757

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Total Kjeldahl Nitrogen	2304918	7.46	7.58	mg/L	1.60	20.0
Total Kjeldahl Nitrogen	2304932	ND	ND	mg/L		20.0

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Kjeldahl Nitrogen	5.35	5.00	mg/L	107	90.0 - 110	126430733

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Total Kjeldahl Nitrogen	1122995	4.81	4.79	5.00	90.0 - 110	96.2	95.8	mg/L	0.417	20.0

Mat. Spike

Parameter	Sample	Spike	Unknown	Known	Units	Recovery %	Limits %	File
Total Kjeldahl Nitrogen	2304918	12.0	7.58	10.0	mg/L	44.2	80.0 - 120	126430742
Total Kjeldahl Nitrogen	2304932	-0.389	ND	5.00	mg/L	0	80.0 - 120	126430748

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SPAC-R

SPACEX
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Project
1106094

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Analytical Set

1124055

EPA 350.1 2

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Ammonia Nitrogen	1123008	ND	0.00336	0.020	mg/L	126449003

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Ammonia Nitrogen	2.14	2.00	mg/L	107	90.0 - 110	126449002
Ammonia Nitrogen	2.11	2.00	mg/L	106	90.0 - 110	126449011
Ammonia Nitrogen	2.17	2.00	mg/L	108	90.0 - 110	126449021
Ammonia Nitrogen	2.04	2.00	mg/L	102	90.0 - 110	126449029
Ammonia Nitrogen	2.07	2.00	mg/L	104	90.0 - 110	126449040
Ammonia Nitrogen	2.05	2.00	mg/L	102	90.0 - 110	126449051
Ammonia Nitrogen	2.03	2.00	mg/L	102	90.0 - 110	126449062
Ammonia Nitrogen	2.07	2.00	mg/L	104	90.0 - 110	126449071
Ammonia Nitrogen	2.04	2.00	mg/L	102	90.0 - 110	126449081
Ammonia Nitrogen	1.98	2.00	mg/L	99.0	90.0 - 110	126449091
Ammonia Nitrogen	2.04	2.00	mg/L	102	90.0 - 110	126449100
Ammonia Nitrogen	1.97	2.00	mg/L	98.5	90.0 - 110	126449111
Ammonia Nitrogen	2.00	2.00	mg/L	100	90.0 - 110	126449116

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Ammonia Nitrogen	2305608	0.077	0.081	mg/L	5.06	20.0
Ammonia Nitrogen	2305651	0.052	0.109	mg/L	70.8 *	20.0

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Ammonia Nitrogen	2.07	2.00	mg/L	104	90.0 - 110	126449001

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Ammonia Nitrogen	1123008	2.14	2.18	2.00	90.0 - 110	107	109	mg/L	1.85	20.0

Mat. Spike

Parameter	Sample	Spike	Unknown	Known	Units	Recovery %	Limits %	File
Ammonia Nitrogen	2305608	2.10	0.081	2.00	mg/L	101	80.0 - 120	126449008
Ammonia Nitrogen	2305651	2.10	0.109	2.00	mg/L	99.6	80.0 - 120	126449012

Analytical Set

1122809

SM 4500-CI G-2011

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Cl2 Res., Total (Onsite) Spec Mid	2305628	NEGATIVE	NEGATIVE	mg/L		20

Analytical Set

1122810

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Field Cl2 Check for CNa	2305628	NEGATIVE	NEGATIVE			20

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SPAC-R

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Analytical Set **1122811**

SM 4500-O G-2016

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Dissolved Oxygen Onsite	2305628	6.6	6.5	mg/L	1.5	20

Analytical Set **1122812**

SM 4500-H+ B-2011

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
pH (Onsite)	6.0	6.0	SU	100	90 - 110	
pH (Onsite)	6.0	6.0	SU	100	90 - 110	

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
pH (Onsite)	2305628	8.2	8.1	SU	1.2	20

Standard

<u>Parameter</u>	<u>Sample</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
pH (Onsite)	1122812	8.1	8.0	SU	101.3	90 - 110	
pH (Onsite)	1122812	8.0	8.0	SU	100	90 - 110	

Analytical Set **1123056**

SM 2550 B - 2010

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Temperature (onsite)	2305628	38	39	Degrees C	2.6	20

Analytical Set **1123475**

SM 2540 D-2015

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MDL</u>	<u>Units</u>	<u>File</u>
Total Suspended Solids	1123475	ND	2	2	mg/L	126434412

ControlBlk

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MDL</u>	<u>Units</u>	<u>File</u>
Total Suspended Solids	1123475	-0.0001			grams	126434411

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Total Suspended Solids	2305567	7210	7570	mg/L	4.87	20.0
Total Suspended Solids	2305644	793	653	mg/L	19.4	20.0
Total Suspended Solids	2305738	545	610	mg/L	11.3	20.0

LCS

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits</u>	<u>File</u>
Total Suspended Solids	1123475	53.0	50.0	mg/L	106	90.0 - 110	126434445

Standard

<u>Parameter</u>	<u>Sample</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Total Suspended Solids		96.0	100	mg/L	96.0	90.0 - 110	126434444

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Analytical Set 1123493

SM 2540 C-2015

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Dissolved Solids	1123493	ND	5.00	5.00	mg/L	126434809

ControlBlk

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Dissolved Solids	1123493	-0.0002			grams	126434796

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Total Dissolved Solids	2305623	800	800	mg/L	0	20.0

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File
Total Dissolved Solids	1123493	200	200	mg/L	100	85.0 - 115	126434810

Standard

Parameter	Sample	Reading	Known	Units	Recover%	Limits%	File
Total Dissolved Solids		104	100	mg/L	104	90.0 - 110	126434797

Analytical Set 1123989

EPA 1664B

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Oil and Grease (HEM)	1123989	ND	0.557	4.00	mg/L	126447630

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File
Oil and Grease (HEM)	1123989	37.1	40.0	mg/L	92.8	78.0 - 114	126447631

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Oil and Grease (HEM)	2305623	38.5	0	ND	40.0	78.0 - 114	96.2		mg/L		20.0

Analytical Set 1123092

EPA 300.0 2.1

AWRL/LOQ C

Parameter	Reading	Known	Units	Recover%	Limits%	File
Fluoride	0.129	0.100	mg/L	129	70.0 - 130	126424313
Nitrate-Nitrogen Total	0.0223	0.0226	mg/L	98.7	70.0 - 130	126424313

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Chloride	1123092	ND	0.0972	0.300	mg/L	126424314
Fluoride	1123092	ND	0.010	0.100	mg/L	126424314
Nitrate-Nitrogen Total	1123092	ND	0.00745	0.0226	mg/L	126424314

CCB

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Chloride	1123092	0.048	0.0972	0.300	mg/L	126424310

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CCB

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Chloride	1123092	0.048	0.0972	0.300	mg/L	126424328
Chloride	1123092	0.045	0.0972	0.300	mg/L	126424342
Fluoride	1123092	0	0.010	0.100	mg/L	126424310
Fluoride	1123092	0	0.010	0.100	mg/L	126424328
Fluoride	1123092	0	0.010	0.100	mg/L	126424342
Nitrate-Nitrogen Total	1123092	0	0.00745	0.0226	mg/L	126424310
Nitrate-Nitrogen Total	1123092	0	0.00745	0.0226	mg/L	126424328
Nitrate-Nitrogen Total	1123092	0	0.00745	0.0226	mg/L	126424342

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Chloride	10.5	10.0	mg/L	105	90.0 - 110	126424309
Chloride	10.3	10.0	mg/L	103	90.0 - 110	126424327
Chloride	10.4	10.0	mg/L	104	90.0 - 110	126424341
Fluoride	9.96	10.0	mg/L	99.6	90.0 - 110	126424309
Fluoride	9.92	10.0	mg/L	99.2	90.0 - 110	126424327
Fluoride	9.99	10.0	mg/L	99.9	90.0 - 110	126424341
Nitrate-Nitrogen Total	2.27	2.26	mg/L	100	90.0 - 110	126424309
Nitrate-Nitrogen Total	2.26	2.26	mg/L	100	90.0 - 110	126424327
Nitrate-Nitrogen Total	2.27	2.26	mg/L	100	90.0 - 110	126424341

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Chloride	1123092	5.27	5.28	5.00	85.0 - 115	105	106	mg/L	0.190	20.0
Fluoride	1123092	5.11	5.17	5.00	88.0 - 120	102	103	mg/L	1.17	20.0
Nitrate-Nitrogen Total	1123092	1.18	1.19	1.13	88.0 - 116	104	105	mg/L	0.844	20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Chloride	2304482	1440	1410	1350	100	80.0 - 120	90.0	60.0 *	mg/L	40.0 *	20.0
Fluoride	2304482	87.4	87.6	ND	100	80.0 - 120	87.4	87.6	mg/L	0.229	20.0
Nitrate-Nitrogen Total	2304482	23.3	23.3	1.49	22.6	80.0 - 120	96.5	96.5	mg/L	0	20.0
Chloride	2304595	18.3	18.2	0.660	20.0	80.0 - 120	88.2	87.7	mg/L	0.569	20.0
Fluoride	2304595	18.1	17.2	ND	20.0	80.0 - 120	90.5	86.0	mg/L	5.10	20.0
Nitrate-Nitrogen Total	2304595	4.31	4.28	ND	4.52	80.0 - 120	95.4	94.7	mg/L	0.698	20.0

Analytical Set 1124447

EPA 300.0 2.1

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Sulfate	1124447	ND	0.254	0.300	mg/L	126459699

CCB

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Sulfate	1124447	0	0.254	0.300	mg/L	126459695
Sulfate	1124447	0	0.254	0.300	mg/L	126459717
Sulfate	1124447	0	0.254	0.300	mg/L	126459729

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SPAC-R

SPACE
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Project
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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Sulfate	9.94	10.0	mg/L	99.4	90.0 - 110	126459694
Sulfate	10.1	10.0	mg/L	101	90.0 - 110	126459716
Sulfate	9.93	10.0	mg/L	99.3	90.0 - 110	126459728

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Sulfate	1124447	5.13	5.07	5.00	85.0 - 115	103	101	mg/L	1.18	20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Sulfate	2306972	1020	1020	944	100	80.0 - 120	76.0 *	76.0 *	mg/L	0	20.0
Sulfate	2307646	106	104	82.5	20.0	80.0 - 120	118	108	mg/L	8.89	20.0

Analytical Set 1122852

SM 3500-Cr B-2011

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Hexavalent Chromium	1122852	0.768	0.550	3.00	ug/L	126419252
Hexavalent Chromium	1122852	ND	0.550	3.00	ug/L	126419259
Hexavalent Chromium	1122852	0.768	0.550	3.00	ug/L	126419264

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Hexavalent Chromium	86.2	80.0	ug/L	108	90.0 - 110	126419253
Hexavalent Chromium	86.7	80.0	ug/L	108	90.0 - 110	126419260
Hexavalent Chromium	86.4	80.0	ug/L	108	90.0 - 110	126419265

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Hexavalent Chromium	1122852	85.7	85.9	80.0	85.0 - 115	107	107	ug/L	0.233	15.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Hexavalent Chromium	2304484	ND	ND	ND	80.0	70.0 - 130	0 *	0 *	ug/L		20.0

Analytical Set 1123073

EPA 245.1 3

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Mercury, Total	1123013	ND	0.113	0.200	ug/L	126424063

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Mercury, Total	5.18	5.000	ug/L	104	90.0 - 110	126424061
Mercury, Total	5.06	5.000	ug/L	101	90.0 - 110	126424062
Mercury, Total	5.10	5.000	ug/L	102	90.0 - 110	126424069
Mercury, Total	5.01	5.000	ug/L	100	90.0 - 110	126424074

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SPAC-R

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ICL

Parameter	Reading	Known	Units	Recover%	Limits%	File
Mercury, Total	20.5	20.00	ug/L	102	90.0 - 110	126424060

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Mercury, Total	4.86	5.000	ug/L	97.2	90.0 - 110	126424059

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Mercury, Total	1123013	8.55	8.69	10.0	85.0 - 115	85.5	86.9	ug/L	1.62	20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Mercury, Total	2305628	9.84	10.1	0.149	10.0	70.0 - 130	96.9	99.5	ug/L	2.65	20.0

Analytical Set

1123222

EPA 200.8 5.4

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Barium, Total	1123060	ND	0.000635	0.001	mg/L	126428091
Lead, Total	1123060	ND	0.000244	0.001	mg/L	126428091
Manganese, Total	1123060	ND	0.000118	0.001	mg/L	126428091
Thallium, Total	1123060	ND	0.000106	0.001	mg/L	126428091

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Aluminum, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126427991
Aluminum, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126427996
Aluminum, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126428000
Aluminum, Total	0.0519	0.05	mg/L	104	90.0 - 110	126428108
Aluminum, Total	0.0519	0.05	mg/L	104	90.0 - 110	126428115
Aluminum, Total	0.0529	0.05	mg/L	106	90.0 - 110	126428135
Aluminum, Total	0.0492	0.05	mg/L	98.4	90.0 - 110	126428137
Aluminum, Total	0.0507	0.05	mg/L	101	90.0 - 110	126428141
Arsenic, Total	0.0483	0.05	mg/L	96.6	90.0 - 110	126427976
Arsenic, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126427983
Arsenic, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126427986
Arsenic, Total	0.0476	0.05	mg/L	95.2	90.0 - 110	126427991
Arsenic, Total	0.0474	0.05	mg/L	94.8	90.0 - 110	126427996
Arsenic, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126428108
Arsenic, Total	0.0489	0.05	mg/L	97.8	90.0 - 110	126428115
Beryllium, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126428108
Beryllium, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126428115
Cadmium, Total	0.0492	0.05	mg/L	98.4	90.0 - 110	126427976
Cadmium, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126427983
Cadmium, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126427991
Cadmium, Total	0.0489	0.05	mg/L	97.8	90.0 - 110	126427996
Cadmium, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126428108

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Parameter	Reading	Known	Units	Recover%	Limits%	File
Cadmium, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126428115
Cadmium, Total	0.0488	0.05	mg/L	97.6	90.0 - 110	126428126
Cadmium, Total	0.0495	0.05	mg/L	99.0	90.0 - 110	126428130
Chromium, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126427976
Chromium, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126427983
Chromium, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126427986
Chromium, Total	0.0489	0.05	mg/L	97.8	90.0 - 110	126427991
Chromium, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126427996
Chromium, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126428000
Chromium, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126428108
Chromium, Total	0.050	0.05	mg/L	100	90.0 - 110	126428115
Chromium, Total	0.0495	0.05	mg/L	99.0	90.0 - 110	126428123
Chromium, Total	0.0487	0.05	mg/L	97.4	90.0 - 110	126428126
Chromium, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126428130
Chromium, Total	0.049	0.05	mg/L	98.0	90.0 - 110	126428132
Copper, Total	0.050	0.05	mg/L	100	90.0 - 110	126427976
Copper, Total	0.051	0.05	mg/L	102	90.0 - 110	126427983
Copper, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126427986
Copper, Total	0.0501	0.05	mg/L	100	90.0 - 110	126427991
Copper, Total	0.050	0.05	mg/L	100	90.0 - 110	126427996
Copper, Total	0.0504	0.05	mg/L	101	90.0 - 110	126428000
Copper, Total	0.051	0.05	mg/L	102	90.0 - 110	126428006
Copper, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126428014
Copper, Total	0.0507	0.05	mg/L	101	90.0 - 110	126428023
Copper, Total	0.0516	0.05	mg/L	103	90.0 - 110	126428033
Copper, Total	0.0502	0.05	mg/L	100	90.0 - 110	126428044
Copper, Total	0.0508	0.05	mg/L	102	90.0 - 110	126428055
Copper, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126428065
Copper, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126428076
Copper, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126428087
Copper, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126428097
Copper, Total	0.0502	0.05	mg/L	100	90.0 - 110	126428108
Copper, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126428115
Copper, Total	0.048	0.05	mg/L	96.0	90.0 - 110	126428123
Copper, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126428126
Copper, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126428130
Copper, Total	0.0489	0.05	mg/L	97.8	90.0 - 110	126428132
Copper, Total	0.0484	0.05	mg/L	96.8	90.0 - 110	126428133
Nickel, Total	0.048	0.05	mg/L	96.0	90.0 - 110	126427976
Nickel, Total	0.0482	0.05	mg/L	96.4	90.0 - 110	126427983
Nickel, Total	0.0481	0.05	mg/L	96.2	90.0 - 110	126427986
Nickel, Total	0.0479	0.05	mg/L	95.8	90.0 - 110	126427991
Nickel, Total	0.0485	0.05	mg/L	97.0	90.0 - 110	126427996
Nickel, Total	0.0485	0.05	mg/L	97.0	90.0 - 110	126428108
Nickel, Total	0.0483	0.05	mg/L	96.6	90.0 - 110	126428115

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Nickel, Total	0.0473	0.05	mg/L	94.6	90.0 - 110	126428123
Nickel, Total	0.0473	0.05	mg/L	94.6	90.0 - 110	126428126
Silver, Total	0.0502	0.05	mg/L	100	90.0 - 110	126427976
Silver, Total	0.051	0.05	mg/L	102	90.0 - 110	126427983
Silver, Total	0.0509	0.05	mg/L	102	90.0 - 110	126427986
Silver, Total	0.0506	0.05	mg/L	101	90.0 - 110	126427991
Silver, Total	0.0508	0.05	mg/L	102	90.0 - 110	126427996
Silver, Total	0.0507	0.05	mg/L	101	90.0 - 110	126428000
Silver, Total	0.0505	0.05	mg/L	101	90.0 - 110	126428108
Silver, Total	0.051	0.05	mg/L	102	90.0 - 110	126428115
Silver, Total	0.0507	0.05	mg/L	101	90.0 - 110	126428123
Silver, Total	0.0499	0.05	mg/L	99.8	90.0 - 110	126428126
Silver, Total	0.0502	0.05	mg/L	100	90.0 - 110	126428130
Silver, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126428132
Silver, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126428133
Silver, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126428135
Zinc, Total	0.0492	0.05	mg/L	98.4	90.0 - 110	126427969
Zinc, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126427976
Zinc, Total	0.050	0.05	mg/L	100	90.0 - 110	126427983
Zinc, Total	0.0487	0.05	mg/L	97.4	90.0 - 110	126427986
Zinc, Total	0.0485	0.05	mg/L	97.0	90.0 - 110	126427991
Zinc, Total	0.0486	0.05	mg/L	97.2	90.0 - 110	126427996
Zinc, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126428108
Zinc, Total	0.049	0.05	mg/L	98.0	90.0 - 110	126428115
Zinc, Total	0.048	0.05	mg/L	96.0	90.0 - 110	126428123

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Aluminum, Total	0.0499	0.05	mg/L	99.8	90.0 - 110	126427964
Arsenic, Total	0.0484	0.05	mg/L	96.8	90.0 - 110	126427964
Beryllium, Total	0.0492	0.05	mg/L	98.4	90.0 - 110	126427964
Cadmium, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126427964
Chromium, Total	0.0499	0.05	mg/L	99.8	90.0 - 110	126427964
Copper, Total	0.0507	0.05	mg/L	101	90.0 - 110	126427964
Nickel, Total	0.0504	0.05	mg/L	101	90.0 - 110	126427964
Silver, Total	0.0515	0.05	mg/L	103	90.0 - 110	126427964
Zinc, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126427964

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Barium, Total	1123060	0.502	0.503	0.500	85.0 - 115	100	101	mg/L	0.199	20.0
Lead, Total	1123060	0.510	0.521	0.500	85.0 - 115	102	104	mg/L	2.13	20.0
Manganese, Total	1123060	0.488	0.489	0.500	85.0 - 115	97.6	97.8	mg/L	0.205	20.0
Thallium, Total	1123060	0.513	0.526	0.500	85.0 - 115	103	105	mg/L	2.50	20.0

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MRL Check

Parameter	Reading	Known	Units	Recover%	Limits%	File
Copper, Total	0.00102	0.001	mg/L	102	25.0 - 175	126427965

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Lead, Total	2305811	0.551	0.563	0.0438	0.500	70.0 - 130	101	104	mg/L	2.34	20.0
Barium, Total	2305911	0.515	0.517	0.017	0.500	70.0 - 130	99.6	100	mg/L	0.401	20.0
Manganese, Total	2305911	0.484	0.469	0.000754	0.500	70.0 - 130	96.6	93.6	mg/L	3.15	20.0
Thallium, Total	2305911	0.493	0.499	0.000227	0.500	70.0 - 130	98.6	99.8	mg/L	1.21	20.0

Analytical Set

1123439

EPA 200.8 5.4

Blank

Parameter	PrepSet	Reading	MDL	MDL	Units	File
Antimony, Total	1123060	ND	0.000847	0.003	mg/L	126432756
Barium, Total	1123060	ND	0.00207	0.005	mg/L	126432756
Lead, Total	1123060	ND	0.000549	0.001	mg/L	126432756
Manganese, Total	1123060	ND	0.000168	0.001	mg/L	126432756
Selenium, Total	1123060	ND	0.00294	0.005	mg/L	126432756
Thallium, Total	1123060	ND	0.000966	0.001	mg/L	126432756

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Antimony, Total	0.0499	0.05	mg/L	99.8	90.0 - 110	126432753
Antimony, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126432763
Antimony, Total	0.049	0.05	mg/L	98.0	90.0 - 110	126432770
Antimony, Total	0.0501	0.05	mg/L	100	90.0 - 110	126432779
Antimony, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126432792
Antimony, Total	0.0488	0.05	mg/L	97.6	90.0 - 110	126432799
Antimony, Total	0.0492	0.05	mg/L	98.4	90.0 - 110	126432809
Antimony, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126432816
Barium, Total	0.0512	0.05	mg/L	102	90.0 - 110	126432753
Barium, Total	0.051	0.05	mg/L	102	90.0 - 110	126432763
Lead, Total	0.0533	0.05	mg/L	107	90.0 - 110	126432739
Lead, Total	0.0543	0.05	mg/L	109	90.0 - 110	126432749
Lead, Total	0.0543	0.05	mg/L	109	90.0 - 110	126432753
Lead, Total	0.0534	0.05	mg/L	107	90.0 - 110	126432763
Manganese, Total	0.0539	0.05	mg/L	108	90.0 - 110	126432753
Manganese, Total	0.0523	0.05	mg/L	105	90.0 - 110	126432763
Manganese, Total	0.0545	0.05	mg/L	109	90.0 - 110	126432792
Manganese, Total	0.0518	0.05	mg/L	104	90.0 - 110	126432799
Manganese, Total	0.0525	0.05	mg/L	105	90.0 - 110	126432809
Manganese, Total	0.0518	0.05	mg/L	104	90.0 - 110	126432816
Selenium, Total	0.052	0.05	mg/L	104	90.0 - 110	126432739
Selenium, Total	0.0537	0.05	mg/L	107	90.0 - 110	126432749
Selenium, Total	0.0529	0.05	mg/L	106	90.0 - 110	126432753
Selenium, Total	0.0529	0.05	mg/L	106	90.0 - 110	126432763

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Selenium, Total	0.0521	0.05	mg/L	104	90.0 - 110	126432770
Selenium, Total	0.0528	0.05	mg/L	106	90.0 - 110	126432779

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Antimony, Total	0.0517	0.05	mg/L	103	90.0 - 110	126432734
Barium, Total	0.0522	0.05	mg/L	104	90.0 - 110	126432734
Lead, Total	0.0537	0.05	mg/L	107	90.0 - 110	126432734
Manganese, Total	0.0544	0.05	mg/L	109	90.0 - 110	126432734
Selenium, Total	0.0528	0.05	mg/L	106	90.0 - 110	126432734

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Antimony, Total	1123060	0.485	0.494	0.500	85.0 - 115	97.0	98.8	mg/L	1.84	20.0
Barium, Total	1123060	0.496	0.502	0.500	85.0 - 115	99.2	100	mg/L	1.20	20.0
Lead, Total	1123060	0.502	0.507	0.500	85.0 - 115	100	101	mg/L	0.991	20.0
Manganese, Total	1123060	0.521	0.531	0.500	85.0 - 115	104	106	mg/L	1.90	20.0
Selenium, Total	1123060	0.491	0.502	0.500	85.0 - 115	98.2	100	mg/L	2.22	20.0
Thallium, Total	1123060	0.496	0.504	0.500	85.0 - 115	99.2	101	mg/L	1.60	20.0

MRL Check

Parameter	Reading	Known	Units	Recover%	Limits%	File
Lead, Total	0.000969	0.001	mg/L	96.9	25.0 - 175	126432735
Manganese, Total	0.00104	0.001	mg/L	104	25.0 - 175	126432735

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Antimony, Total	2305811	0.490	0.481	ND	0.500	70.0 - 130	98.0	96.2	mg/L	1.85	20.0
Barium, Total	2305811	0.509	0.507	0.0167	0.500	70.0 - 130	98.5	98.1	mg/L	0.407	20.0
Lead, Total	2305811	0.441	0.433	ND	0.500	70.0 - 130	88.2	86.6	mg/L	1.83	20.0
Manganese, Total	2305811	0.457	0.444	0.000782	0.500	70.0 - 130	91.2	88.6	mg/L	2.89	20.0
Selenium, Total	2305811	0.468	0.458	ND	0.500	70.0 - 130	93.6	91.6	mg/L	2.16	20.0
Thallium, Total	2305811	0.445	0.439	ND	0.500	70.0 - 130	89.0	87.8	mg/L	1.36	20.0

Analytical Set

1123677

EPA 200.7 4.4

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Calcium	1123060	ND	0.0156	0.500	mg/L	126438124
Iron, Total	1123060	ND	0.00379	0.025	mg/L	126438124

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Calcium	25.3	25.0	mg/L	101	90.0 - 110	126438114
Calcium	24.9	25.0	mg/L	99.6	90.0 - 110	126438115
Calcium	24.8	25.0	mg/L	99.2	90.0 - 110	126438123
Calcium	24.8	25.0	mg/L	99.2	90.0 - 110	126438130

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CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Calcium	24.6	25.0	mg/L	98.4	90.0 - 110	126438136
Calcium	24.5	25.0	mg/L	98.0	90.0 - 110	126438145
Calcium	24.5	25.0	mg/L	98.0	90.0 - 110	126438154
Calcium	24.6	25.0	mg/L	98.4	90.0 - 110	126438164
Calcium	24.5	25.0	mg/L	98.0	90.0 - 110	126438172
Calcium	24.5	25.0	mg/L	98.0	90.0 - 110	126438179
Iron, Total	2.48	2.50	mg/L	99.2	90.0 - 110	126438114
Iron, Total	2.45	2.50	mg/L	98.0	90.0 - 110	126438115
Iron, Total	2.44	2.50	mg/L	97.6	90.0 - 110	126438123
Iron, Total	2.44	2.50	mg/L	97.6	90.0 - 110	126438130
Iron, Total	2.42	2.50	mg/L	96.8	90.0 - 110	126438136
Iron, Total	2.41	2.50	mg/L	96.4	90.0 - 110	126438145
Iron, Total	2.41	2.50	mg/L	96.4	90.0 - 110	126438154
Iron, Total	2.41	2.50	mg/L	96.4	90.0 - 110	126438164
Iron, Total	2.41	2.50	mg/L	96.4	90.0 - 110	126438172
Iron, Total	2.40	2.50	mg/L	96.0	90.0 - 110	126438179

ICL

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Calcium	49.7	50.0	mg/L	99.4	95.0 - 105	126438108
Iron, Total	4.77	5.00	mg/L	95.4	95.0 - 105	126438108

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Calcium	24.8	25.0	mg/L	99.2	90.0 - 110	126438112
Iron, Total	2.46	2.50	mg/L	98.4	90.0 - 110	126438112

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Calcium	1123060	4.89	4.92	5.00	85.0 - 115	97.8	98.4	mg/L	0.612	25.0
Iron, Total	1123060	0.488	0.490	0.500	85.0 - 115	97.6	98.0	mg/L	0.409	25.0

LDR

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Calcium	96.9	100	mg/L	96.9	90.0 - 110	126438109
Iron, Total	9.75	10.0	mg/L	97.5	90.0 - 110	126438109

MRL Check

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Calcium	0.521	0.500	mg/L	104	25.0 - 175	126438113
Iron, Total	0.0538	0.050	mg/L	108	25.0 - 175	126438113

MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Calcium	2305811	31.1	31.8	27.1	5.00	75.0 - 125	80.0	94.0	mg/L	16.1	25.0
Iron, Total	2305811	0.497	0.503	0.00607	0.500	75.0 - 125	98.2	99.4	mg/L	1.21	25.0

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Analytical Set

1124581

SM 5310 C-2014

AWRL/LOQ C

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon	1.99	2.00	mg/L	99.5	50.0 - 150	126462988

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Organic Carbon	1124581	0.0901	0.0618	0.500	mg/L	126462987
Total Organic Carbon	1124581	ND	0.0618	0.500	mg/L	126462993
Total Organic Carbon	1124581	ND	0.0618	0.500	mg/L	126463008

CCB

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Organic Carbon	1124581	0.0848	0.0618	0.500	mg/L	126462981
Total Organic Carbon	1124581	0.0931	0.0618	0.500	mg/L	126462989
Total Organic Carbon	1124581	0.110	0.0618	0.500	mg/L	126463005
Total Organic Carbon	1124581	0.155	0.0618	0.500	mg/L	126463019

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon	10.2	10.0	mg/L	102	90.0 - 110	126462984
Total Organic Carbon	10.4	10.0	mg/L	104	90.0 - 110	126462991
Total Organic Carbon	10.5	10.0	mg/L	105	90.0 - 110	126463006
Total Organic Carbon	10.2	10.0	mg/L	102	90.0 - 110	126463020

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon	20.5	20.0	mg/L	102	90.0 - 110	126462983
Total Organic Carbon	20.3	20.0	mg/L	102	90.0 - 110	126462990

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon	10.1	10.0	mg/L	101	90.0 - 110	126462985
Total Organic Carbon	10.2	10.0	mg/L	102	90.0 - 110	126462992

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File
Total Organic Carbon	1124581	5.07	5.00	mg/L	101	85.0 - 115	126462986
Total Organic Carbon	1124581	5.22	5.00	mg/L	104	85.0 - 115	126462994
Total Organic Carbon	1124581	5.35	5.00	mg/L	107	85.0 - 115	126463007

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Total Organic Carbon	2306732	14.7	14.4	4.14	10.0	85.0 - 115	106	103	mg/L	2.88	20.0
Total Organic Carbon	2306796	14.4	14.5	3.74	10.0	85.0 - 115	107	108	mg/L	0.934	20.0

Standard

Parameter	Sample	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon		48.4	50.0	mg/L	96.8	90.0 - 110	126462982

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Analytical Set

1124795

EPA 200.8 5.4

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Thallium, Total	1123060	ND	0.00025	0.0005	mg/L	126467375

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Thallium, Total	0.0476	0.05	mg/L	95.2	90.0 - 110	126467374
Thallium, Total	0.0474	0.05	mg/L	94.8	90.0 - 110	126467383
Thallium, Total	0.0509	0.05	mg/L	102	90.0 - 110	126467393
Thallium, Total	0.0474	0.05	mg/L	94.8	90.0 - 110	126467402
Thallium, Total	0.0456	0.05	mg/L	91.2	90.0 - 110	126467411

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Thallium, Total	0.0489	0.05	mg/L	97.8	90.0 - 110	126467360

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Thallium, Total	1123060	0.561	0.567	0.500	85.0 - 115	112	113	mg/L	1.06	20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Thallium, Total	2305811	0.548	0.558	ND	0.500	70.0 - 130	110	112	mg/L	1.81	20.0

Analytical Set

1123030

EPA 624.1

BFB

Parameter	Sample	RefMass	Reading	%	Limits%	File
BFB Mass 173	1123030	174	140	1.3	0 - 2.00	126423572
BFB Mass 174	1123030	95.0	10384	56.9	50.0 - 100	126423572
BFB Mass 175	1123030	174	921	8.9	5.00 - 9.00	126423572
BFB Mass 176	1123030	174	10267	98.9	95.0 - 101	126423572
BFB Mass 177	1123030	176	672	6.5	5.00 - 9.00	126423572
BFB Mass 50	1123030	95.0	4030	22.1	15.0 - 40.0	126423572
BFB Mass 75	1123030	95.0	9801	53.7	30.0 - 60.0	126423572
BFB Mass 95	1123030	95.0	18235	100.0	100 - 100	126423572
BFB Mass 96	1123030	95.0	1272	7.0	5.00 - 9.00	126423572

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
1,1,1-Trichloroethane	1123030	ND	0.531	1.00	ug/L	126423576
1,1,2-Trichloroethane	1123030	ND	0.563	1.00	ug/L	126423576
1,1-Dichloroethane	1123030	ND	0.593	1.00	ug/L	126423576
1,1-Dichloroethylene	1123030	ND	0.574	1.00	ug/L	126423576
1,2-Dibromoethane (EDB)	1123030	ND	0.562	1.00	ug/L	126423576
1,2-Dichloroethane	1123030	ND	0.590	1.00	ug/L	126423576
1,2-Dichloropropane	1123030	ND	0.615	1.00	ug/L	126423576
Benzene	1123030	ND	0.453	1.00	ug/L	126423576

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Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Bromodichloromethane	1123030	ND	0.409	1.00	ug/L	126423576
Bromoform	1123030	ND	0.500	1.00	ug/L	126423576
Carbon Tetrachloride	1123030	ND	0.299	1.00	ug/L	126423576
Chlorobenzene	1123030	ND	0.558	1.00	ug/L	126423576
Chloroethane	1123030	ND	1.12	1.12	ug/L	126423576
Chloroform	1123030	ND	0.463	1.00	ug/L	126423576
Chloromethane (Methyl Chloride)	1123030	ND	0.811	1.00	ug/L	126423576
cis-1,3-Dichloropropene	1123030	ND	0.660	1.00	ug/L	126423576
Dibromochloromethane	1123030	ND	0.311	1.00	ug/L	126423576
Dichloromethane	1123030	ND	1.02	1.02	ug/L	126423576
Ethylbenzene	1123030	ND	0.498	1.00	ug/L	126423576
m-Dichlorobenzene (1,3-DCB)	1123030	ND	0.619	1.00	ug/L	126423576
Methyl ethyl ketone (Butanone)	1123030	ND	0.742	1.00	ug/L	126423576
o-Dichlorobenzene (1,2-DCB)	1123030	ND	0.532	1.00	ug/L	126423576
p-Dichlorobenzene (1,4-DCB)	1123030	ND	0.837	1.00	ug/L	126423576
Tetrachloroethylene	1123030	ND	0.607	1.00	ug/L	126423576
Toluene	1123030	ND	0.655	1.00	ug/L	126423576
trans-1,2-Dichloroethylene	1123030	ND	0.701	1.00	ug/L	126423576
trans-1,3-Dichloropropene	1123030	ND	0.627	1.00	ug/L	126423576
Trichloroethylene	1123030	ND	0.521	1.00	ug/L	126423576
Vinyl chloride	1123030	ND	0.702	1.00	ug/L	126423576

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	1123030	LCS	99990	99910	49960	149900	126423573	1123030
1,4-DichlorobenzeneD4 (ISTD)	1123030	LCS Dup	100400	99910	49960	149900	126423574	1123030
1,4-DichlorobenzeneD4 (ISTD)	1123030	Blank	91680	99910	49960	149900	126423576	1123030
ChlorobenzeneD5 (ISTD)	1123030	LCS	210300	205900	103000	308900	126423573	1123030
ChlorobenzeneD5 (ISTD)	1123030	LCS Dup	208900	205900	103000	308900	126423574	1123030
ChlorobenzeneD5 (ISTD)	1123030	Blank	212500	205900	103000	308900	126423576	1123030
1,4-DichlorobenzeneD4 (ISTD)	2305623	Unknown	82270	99910	49960	149900	126423579	1123030
ChlorobenzeneD5 (ISTD)	2305623	Unknown	190600	205900	103000	308900	126423579	1123030
1,4-DichlorobenzeneD4 (ISTD)	2305754	MS	91100	99910	49960	149900	126423581	1123030
1,4-DichlorobenzeneD4 (ISTD)	2305754	MSD	90720	99910	49960	149900	126423582	1123030
ChlorobenzeneD5 (ISTD)	2305754	MS	187900	205900	103000	308900	126423581	1123030
ChlorobenzeneD5 (ISTD)	2305754	MSD	185900	205900	103000	308900	126423582	1123030

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	1123030	LCS	11.97	11.97	11.91	12.03	126423573	1123030
1,4-DichlorobenzeneD4 (ISTD)	1123030	LCS Dup	11.97	11.97	11.91	12.03	126423574	1123030
1,4-DichlorobenzeneD4 (ISTD)	1123030	Blank	11.97	11.97	11.91	12.03	126423576	1123030
ChlorobenzeneD5 (ISTD)	1123030	LCS	9.597	9.597	9.537	9.657	126423573	1123030
ChlorobenzeneD5 (ISTD)	1123030	LCS Dup	9.597	9.597	9.537	9.657	126423574	1123030
ChlorobenzeneD5 (ISTD)	1123030	Blank	9.597	9.597	9.537	9.657	126423576	1123030

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IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	2305623	Unknown	11.97	11.97	11.91	12.03	126423579	1123030
ChlorobenzeneD5 (ISTD)	2305623	Unknown	9.597	9.597	9.537	9.657	126423579	1123030
1,4-DichlorobenzeneD4 (ISTD)	2305754	MS	11.97	11.97	11.91	12.03	126423581	1123030
1,4-DichlorobenzeneD4 (ISTD)	2305754	MSD	11.97	11.97	11.91	12.03	126423582	1123030
ChlorobenzeneD5 (ISTD)	2305754	MS	9.597	9.597	9.537	9.657	126423581	1123030
ChlorobenzeneD5 (ISTD)	2305754	MSD	9.597	9.597	9.537	9.657	126423582	1123030

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,1,1-Trichloroethane	1123030	20.7	20.2	20.0	70.0 - 130	104	101	ug/L	2.93	21.0
1,1,2,2-Tetrachloroethane	1123030	22.8	22.0	20.0	60.0 - 140	114	110	ug/L	3.57	36.0
1,1,2-Trichloroethane	1123030	21.3	21.8	20.0	70.0 - 130	106	109	ug/L	2.79	27.0
1,1-Dichloroethane	1123030	21.5	21.0	20.0	70.0 - 130	108	105	ug/L	2.82	24.0
1,1-Dichloroethylene	1123030	21.0	21.0	20.0	50.0 - 150	105	105	ug/L	0	40.0
1,2-Dibromoethane (EDB)	1123030	21.6	21.3	20.0	78.4 - 122	108	106	ug/L	1.87	30.0
1,2-Dichloroethane	1123030	21.6	21.9	20.0	70.0 - 130	108	110	ug/L	1.83	29.0
1,2-Dichloropropane	1123030	21.3	21.2	20.0	35.0 - 165	106	106	ug/L	0	69.0
Benzene	1123030	20.1	19.5	20.0	65.0 - 135	100	97.5	ug/L	2.53	33.0
Bromodichloromethane	1123030	21.8	21.3	20.0	65.0 - 135	109	106	ug/L	2.79	34.0
Bromoform	1123030	20.8	20.1	20.0	70.0 - 130	104	100	ug/L	3.92	25.0
Bromomethane (Methyl Bromi	1123030	16.4	16.2	20.0	15.0 - 185	82.0	81.0	ug/L	1.23	90.0
Carbon Tetrachloride	1123030	21.9	21.4	20.0	70.0 - 130	110	107	ug/L	2.76	26.0
Chlorobenzene	1123030	20.1	20.2	20.0	65.0 - 135	100	101	ug/L	0.995	29.0
Chloroethane	1123030	19.6	19.7	20.0	40.0 - 160	98.0	98.5	ug/L	0.509	47.0
Chloroform	1123030	21.2	20.6	20.0	70.0 - 135	106	103	ug/L	2.87	32.0
Chloromethane (Methyl Chloride)	1123030	17.2	16.4	20.0	0.100 - 205	86.0	82.0	ug/L	4.76	472
cis-1,3-Dichloropropene	1123030	19.8	19.4	20.0	25.0 - 175	99.0	97.0	ug/L	2.04	79.0
Dibromochloromethane	1123030	21.0	20.7	20.0	70.0 - 135	105	104	ug/L	0.957	30.0
Dichloromethane	1123030	20.8	20.5	20.0	60.0 - 140	104	102	ug/L	1.94	192
Ethylbenzene	1123030	21.7	21.5	20.0	60.0 - 140	108	108	ug/L	0	34.0
m-Dichlorobenzene (1,3-DCB)	1123030	22.3	21.4	20.0	70.0 - 130	112	107	ug/L	4.57	24.0
Methyl ethyl ketone (Butanone)	1123030	23.2	23.3	20.0	62.3 - 136	116	116	ug/L	0	30.0
o-Dichlorobenzene (1,2-DCB)	1123030	21.5	20.9	20.0	65.0 - 135	108	104	ug/L	3.77	31.0
p-Dichlorobenzene (1,4-DCB)	1123030	21.3	21.1	20.0	65.0 - 135	106	106	ug/L	0	31.0
Tetrachloroethylene	1123030	21.2	20.9	20.0	70.0 - 130	106	104	ug/L	1.90	23.0
Toluene	1123030	19.5	19.5	20.0	70.0 - 130	97.5	97.5	ug/L	0	22.0
trans-1,2-Dichloroethylene	1123030	19.7	19.6	20.0	70.0 - 130	98.5	98.0	ug/L	0.509	27.0
trans-1,3-Dichloropropene	1123030	21.0	21.1	20.0	50.0 - 150	105	106	ug/L	0.948	52.0
Trichloroethylene	1123030	20.3	20.3	20.0	65.0 - 135	102	102	ug/L	0	29.0
Vinyl chloride	1123030	21.5	20.3	20.0	5.00 - 195	108	102	ug/L	5.71	100

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
1,1,1-Trichloroethane	2305754	98.6	96.8	1.35	100	52.0 - 162	97.2	95.4	ug/L	1.87	36.0
1,1,2,2-Tetrachloroethane	2305754	106	106	1.35	100	46.0 - 157	105	105	ug/L	0	61.0

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MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
1,1,2-Trichloroethane	2305754	108	109	1.35	100	52.0 - 150	107	108	ug/L	0.933	45.0
1,1-Dichloroethane	2305754	104	105	1.35	100	59.0 - 155	103	104	ug/L	0.969	40.0
1,1-Dichloroethylene	2305754	105	113	1.35	100	0.100 - 234	104	112	ug/L	7.43	32.0
1,2-Dibromoethane (EDB)	2305754	104	108	1.35	100	49.3 - 120	103	107	ug/L	3.82	30.0
1,2-Dichloroethane	2305754	108	105	1.35	100	49.0 - 155	107	104	ug/L	2.85	49.0
1,2-Dichloropropane	2305754	104	103	1.35	100	0.100 - 210	103	102	ug/L	0.979	55.0
Benzene	2305754	96.8	97.4	1.35	100	37.0 - 151	95.4	96.0	ug/L	0.627	61.0
Bromodichloromethane	2305754	103	102	1.35	100	35.0 - 155	102	101	ug/L	0.989	56.0
Bromoform	2305754	91.6	92.0	1.35	100	45.0 - 169	90.2	90.6	ug/L	0.442	42.0
Bromomethane (Methyl Bromi	2305754	69.5	70.4	1.35	100	0.100 - 242	68.2	69.0	ug/L	1.31	61.0
Carbon Tetrachloride	2305754	87.2	88.0	1.35	100	70.0 - 140	85.8	86.6	ug/L	0.928	41.0
Chlorobenzene	2305754	98.7	99.7	1.35	100	37.0 - 160	97.4	98.4	ug/L	1.02	53.0
Chloroethane	2305754	90.7	90.4	1.35	100	14.0 - 230	89.4	89.0	ug/L	0.336	78.0
Chloroform	2305754	101	105	1.35	100	51.0 - 138	99.6	104	ug/L	3.94	54.0
Chloromethane (Methyl Chloride)	2305754	80.2	78.5	1.35	100	0.100 - 273	78.8	77.2	ug/L	2.18	60.0
cis-1,3-Dichloropropene	2305754	92.9	92.6	1.35	100	0.100 - 227	91.6	91.2	ug/L	0.328	58.0
Dibromochloromethane	2305754	95.8	97.6	1.35	100	53.0 - 149	94.4	96.2	ug/L	1.89	50.0
Dichloromethane	2305754	105	104	1.35	100	0.100 - 221	104	103	ug/L	0.969	28.0
Ethylbenzene	2305754	103	104	1.35	100	37.0 - 162	102	103	ug/L	0.979	63.0
m-Dichlorobenzene (1,3-DCB)	2305754	106	107	1.35	100	59.0 - 156	105	106	ug/L	0.951	43.0
Methyl ethyl ketone (Butanone)	2305754	127	135	11.0	100	0.100 - 211	116	124	ug/L	6.67	30.0
o-Dichlorobenzene (1,2-DCB)	2305754	103	104	1.35	100	18.0 - 190	102	103	ug/L	0.979	57.0
p-Dichlorobenzene (1,4-DCB)	2305754	101	100	1.35	100	18.0 - 190	99.6	98.6	ug/L	1.01	57.0
Tetrachloroethylene	2305754	102	103	1.35	100	64.0 - 148	101	102	ug/L	0.989	39.0
Toluene	2305754	96.4	95.6	1.35	100	47.0 - 150	95.0	94.2	ug/L	0.845	41.0
trans-1,2-Dichloroethylene	2305754	96.6	94.2	1.35	100	54.0 - 156	95.2	92.8	ug/L	2.55	45.0
trans-1,3-Dichloropropene	2305754	98.9	103	1.35	100	17.0 - 183	97.6	102	ug/L	4.12	86.0
Trichloroethylene	2305754	104	103	1.35	100	70.0 - 157	103	102	ug/L	0.979	48.0
Vinyl chloride	2305754	82.4	82.4	1.35	100	0.100 - 251	81.0	81.0	ug/L	0	66.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
1,2-DCA-d4 (SURR)	1123030	LCS	20.2	20.0	ug/L	101	70.0 - 130	126423573
1,2-DCA-d4 (SURR)	1123030	LCS Dup	20.7	20.0	ug/L	104	70.0 - 130	126423574
1,2-DCA-d4 (SURR)	1123030	Blank	21.0	20.0	ug/L	105	70.0 - 130	126423576
Bromofluorobenzene (SURR)	1123030	LCS	19.4	20.0	ug/L	97.0	70.0 - 130	126423573
Bromofluorobenzene (SURR)	1123030	LCS Dup	19.0	20.0	ug/L	95.0	70.0 - 130	126423574
Bromofluorobenzene (SURR)	1123030	Blank	19.8	20.0	ug/L	99.0	70.0 - 130	126423576
Dibromofluoromethane (SURR)	1123030	LCS	19.6	20.0	ug/L	98.0	70.0 - 130	126423573
Dibromofluoromethane (SURR)	1123030	LCS Dup	19.9	20.0	ug/L	99.5	70.0 - 130	126423574
Dibromofluoromethane (SURR)	1123030	Blank	19.6	20.0	ug/L	98.0	70.0 - 130	126423576
TolueneD8 (SURR)	1123030	LCS	19.8	20.0	ug/L	99.0	70.0 - 130	126423573
TolueneD8 (SURR)	1123030	LCS Dup	19.5	20.0	ug/L	97.5	70.0 - 130	126423574
TolueneD8 (SURR)	1123030	Blank	19.9	20.0	ug/L	99.5	70.0 - 130	126423576
1,2-DCA-d4 (SURR)	2305623	Unknown	21.5	20.0	ug/L	108	70.0 - 130	126423579

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Surrogate								
<u>Parameter</u>	<u>Sample</u>	<u>Type</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Bromofluorobenzene (SURR)	2305623	Unknown	20.5	20.0	ug/L	102	70.0 - 130	126423579
Dibromofluoromethane (SURR)	2305623	Unknown	19.6	20.0	ug/L	98.0	70.0 - 130	126423579
TolueneD8 (SURR)	2305623	Unknown	19.7	20.0	ug/L	98.5	70.0 - 130	126423579
1,2-DCA-d4 (SURR)	2305754	MS	20.8	20.0	ug/L	104	70.0 - 130	126423581
1,2-DCA-d4 (SURR)	2305754	MSD	20.7	20.0	ug/L	104	70.0 - 130	126423582
Bromofluorobenzene (SURR)	2305754	MS	18.5	20.0	ug/L	92.5	70.0 - 130	126423581
Bromofluorobenzene (SURR)	2305754	MSD	19.0	20.0	ug/L	95.0	70.0 - 130	126423582
Dibromofluoromethane (SURR)	2305754	MS	20.1	20.0	ug/L	100	70.0 - 130	126423581
Dibromofluoromethane (SURR)	2305754	MSD	20.2	20.0	ug/L	101	70.0 - 130	126423582
TolueneD8 (SURR)	2305754	MS	19.7	20.0	ug/L	98.5	70.0 - 130	126423581
TolueneD8 (SURR)	2305754	MSD	20.0	20.0	ug/L	100	70.0 - 130	126423582

Analytical Set

1123033

EPA 624.1

BFB						
<u>Parameter</u>	<u>Sample</u>	<u>RefMass</u>	<u>Reading</u>	<u>%</u>	<u>Limits%</u>	<u>File</u>
BFB Mass 173	1123033	174	140	1.3	0 - 2.00	126423603
BFB Mass 174	1123033	95.0	10384	56.9	50.0 - 100	126423603
BFB Mass 175	1123033	174	921	8.9	5.00 - 9.00	126423603
BFB Mass 176	1123033	174	10267	98.9	95.0 - 101	126423603
BFB Mass 177	1123033	176	672	6.5	5.00 - 9.00	126423603
BFB Mass 50	1123033	95.0	4030	22.1	15.0 - 40.0	126423603
BFB Mass 75	1123033	95.0	9801	53.7	30.0 - 60.0	126423603
BFB Mass 95	1123033	95.0	18235	100.0	100 - 100	126423603
BFB Mass 96	1123033	95.0	1272	7.0	5.00 - 9.00	126423603

Blank						
<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MDL</u>	<u>Units</u>	<u>File</u>
Acrolein	1123033	ND	2.33	4.00	ug/L	126423607
Acrylonitrile	1123033	ND	0.998	1.00	ug/L	126423607

IS Areas								
<u>Parameter</u>	<u>Sample</u>	<u>Type</u>	<u>Reading</u>	<u>CCVISM</u>	<u>Low</u>	<u>High</u>	<u>File</u>	<u>PrepSet</u>
1,4-DichlorobenzeneD4 (ISTD)	1123033	LCS	99990	99910	49960	149900	126423604	1123033
1,4-DichlorobenzeneD4 (ISTD)	1123033	LCS Dup	100400	99910	49960	149900	126423605	1123033
1,4-DichlorobenzeneD4 (ISTD)	1123033	Blank	91680	99910	49960	149900	126423607	1123033
ChlorobenzeneD5 (ISTD)	1123033	LCS	210300	205900	103000	308900	126423604	1123033
ChlorobenzeneD5 (ISTD)	1123033	LCS Dup	208900	205900	103000	308900	126423605	1123033
ChlorobenzeneD5 (ISTD)	1123033	Blank	212500	205900	103000	308900	126423607	1123033
1,4-DichlorobenzeneD4 (ISTD)	2305623	Unknown	85540	99910	49960	149900	126423608	1123033
ChlorobenzeneD5 (ISTD)	2305623	Unknown	196700	205900	103000	308900	126423608	1123033
1,4-DichlorobenzeneD4 (ISTD)	2305754	MS	91100	99910	49960	149900	126423611	1123033
1,4-DichlorobenzeneD4 (ISTD)	2305754	MSD	90720	99910	49960	149900	126423612	1123033
ChlorobenzeneD5 (ISTD)	2305754	MS	187900	205900	103000	308900	126423611	1123033
ChlorobenzeneD5 (ISTD)	2305754	MSD	185900	205900	103000	308900	126423612	1123033

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IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	1123033	LCS	11.97	11.97	11.91	12.03	126423604	1123033
1,4-DichlorobenzeneD4 (ISTD)	1123033	LCS Dup	11.97	11.97	11.91	12.03	126423605	1123033
1,4-DichlorobenzeneD4 (ISTD)	1123033	Blank	11.97	11.97	11.91	12.03	126423607	1123033
ChlorobenzeneD5 (ISTD)	1123033	LCS	9.597	9.597	9.537	9.657	126423604	1123033
ChlorobenzeneD5 (ISTD)	1123033	LCS Dup	9.597	9.597	9.537	9.657	126423605	1123033
ChlorobenzeneD5 (ISTD)	1123033	Blank	9.597	9.597	9.537	9.657	126423607	1123033
1,4-DichlorobenzeneD4 (ISTD)	2305623	Unknown	11.97	11.97	11.91	12.03	126423608	1123033
ChlorobenzeneD5 (ISTD)	2305623	Unknown	9.597	9.597	9.537	9.657	126423608	1123033
1,4-DichlorobenzeneD4 (ISTD)	2305754	MS	11.97	11.97	11.91	12.03	126423611	1123033
1,4-DichlorobenzeneD4 (ISTD)	2305754	MSD	11.97	11.97	11.91	12.03	126423612	1123033
ChlorobenzeneD5 (ISTD)	2305754	MS	9.597	9.597	9.537	9.657	126423611	1123033
ChlorobenzeneD5 (ISTD)	2305754	MSD	9.597	9.597	9.537	9.657	126423612	1123033

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Acrolein	1123033	60.6	52.2	40.0	60.0 - 140	152 *	130	ug/L	15.6	30.0
Acrylonitrile	1123033	43.8	46.4	40.0	60.0 - 140	110	116	ug/L	5.31	30.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Acrolein	2305754	21.3	13.6	ND	200	40.0 - 160	10.6 *	6.80 *	ug/L	44.1	60.0
Acrylonitrile	2305754	251	247	ND	200	40.0 - 160	126	124	ug/L	1.61	60.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
1,2-DCA-d4 (SURR)	1123033	LCS	20.2	20.0	ug/L	101	70.0 - 130	126423604
1,2-DCA-d4 (SURR)	1123033	LCS Dup	20.7	20.0	ug/L	104	70.0 - 130	126423605
1,2-DCA-d4 (SURR)	1123033	Blank	21.0	20.0	ug/L	105	70.0 - 130	126423607
Bromofluorobenzene (SURR)	1123033	LCS	19.4	20.0	ug/L	97.0	70.0 - 130	126423604
Bromofluorobenzene (SURR)	1123033	LCS Dup	19.0	20.0	ug/L	95.0	70.0 - 130	126423605
Bromofluorobenzene (SURR)	1123033	Blank	19.8	20.0	ug/L	99.0	70.0 - 130	126423607
Dibromofluoromethane (SURR)	1123033	LCS	19.6	20.0	ug/L	98.0	70.0 - 130	126423604
Dibromofluoromethane (SURR)	1123033	LCS Dup	19.9	20.0	ug/L	99.5	70.0 - 130	126423605
Dibromofluoromethane (SURR)	1123033	Blank	19.6	20.0	ug/L	98.0	70.0 - 130	126423607
TolueneD8 (SURR)	1123033	LCS	19.8	20.0	ug/L	99.0	70.0 - 130	126423604
TolueneD8 (SURR)	1123033	LCS Dup	19.5	20.0	ug/L	97.5	70.0 - 130	126423605
TolueneD8 (SURR)	1123033	Blank	19.9	20.0	ug/L	99.5	70.0 - 130	126423607
1,2-DCA-d4 (SURR)	2305623	Unknown	20.5	20.0	ug/L	102	70.0 - 130	126423608
Bromofluorobenzene (SURR)	2305623	Unknown	19.7	20.0	ug/L	98.5	70.0 - 130	126423608
Dibromofluoromethane (SURR)	2305623	Unknown	19.0	20.0	ug/L	95.0	70.0 - 130	126423608
TolueneD8 (SURR)	2305623	Unknown	19.5	20.0	ug/L	97.5	70.0 - 130	126423608
1,2-DCA-d4 (SURR)	2305754	MS	20.8	20.0	ug/L	104	70.0 - 130	126423611
1,2-DCA-d4 (SURR)	2305754	MSD	20.7	20.0	ug/L	104	70.0 - 130	126423612
Bromofluorobenzene (SURR)	2305754	MS	18.5	20.0	ug/L	92.5	70.0 - 130	126423611
Bromofluorobenzene (SURR)	2305754	MSD	19.0	20.0	ug/L	95.0	70.0 - 130	126423612
Dibromofluoromethane (SURR)	2305754	MS	20.1	20.0	ug/L	100	70.0 - 130	126423611

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Surrogate								
Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
Dibromofluoromethane (Surr)	2305754	MSD	20.2	20.0	ug/L	101	70.0 - 130	126423612
TolueneD8 (Surr)	2305754	MS	19.7	20.0	ug/L	98.5	70.0 - 130	126423611
TolueneD8 (Surr)	2305754	MSD	20.0	20.0	ug/L	100	70.0 - 130	126423612

Analytical Set

1123853

EPA 608.3

Blank								
Parameter	PrepSet	Reading	MDL	MQL	Units	File		
PCB-1016	1123138	ND	0.202	0.202	ug/L	126443786		
PCB-1221	1123138	ND	0.143	0.200	ug/L	126443786		
PCB-1232	1123138	ND	0.143	0.200	ug/L	126443786		
PCB-1242	1123138	ND	0.192	0.200	ug/L	126443786		
PCB-1248	1123138	ND	0.143	0.200	ug/L	126443786		
PCB-1254	1123138	ND	0.143	0.200	ug/L	126443786		
PCB-1260	1123138	ND	0.161	0.200	ug/L	126443786		
PCB-1262	1123138	ND	0.198	0.200	ug/L	126443786		
PCB-1268	1123138	ND	0.143	0.200	ug/L	126443786		

CCV								
Parameter	Reading	Known	Units	Recover%	Limits%	File		
PCB-1016	983	1000	ug/L	98.3	80.0 - 115	126443779		
PCB-1016	1060	1000	ug/L	106	80.0 - 115	126443785		
PCB-1016	1130	1000	ug/L	113	80.0 - 115	126443793		
PCB-1260	881	1000	ug/L	88.1	80.0 - 115	126443779		
PCB-1260	911	1000	ug/L	91.1	80.0 - 115	126443785		
PCB-1260	945	1000	ug/L	94.5	80.0 - 115	126443793		

LCS Dup										
Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
PCB-1016	1123138	798	887	1000	39.8 - 135	79.8	88.7	ug/L	10.6	30.0
PCB-1260	1123138	649	755	1000	36.1 - 134	64.9	75.5	ug/L	15.1	30.0

Surrogate								
Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
Decachlorobiphenyl	1123138	Blank	45.3	100	ug/L	45.3	10.0 - 200	126443786
Tetrachloro-m-Xylene (Surr)	1123138	Blank	48.5	100	ug/L	48.5	10.0 - 200	126443786
Decachlorobiphenyl	2305623	Unknown	0.580	0.976	ug/L	59.4	10.0 - 200	126443791
Tetrachloro-m-Xylene (Surr)	2305623	Unknown	0.578	0.976	ug/L	59.2	10.0 - 200	126443791

Analytical Set

1124948

ASTM D7065-11

Blank								
Parameter	PrepSet	Reading	MDL	MQL	Units	File		
Nonylphenol	1124341	ND	5.00	30.0	ug/L	126470972		

CCV								
Parameter	Reading	Known	Units	Recover%	Limits%	File		
Nonylphenol	150000	150000	ug/L	99.8	70.0 - 130	126470971		

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Nonylphenol	164000	150000	ug/L	110	70.0 - 130	126470983

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
Acenaphthene-d10-ISTD	624841	CCV	669900	669900	335000	1005000	126470971	624841
Acenaphthene-d10-ISTD	624841	CCV	645200	669900	335000	1005000	126470983	624841
Phenanthrene-d10-ISTD	624841	CCV	892600	892600	446300	1339000	126470971	624841
Phenanthrene-d10-ISTD	624841	CCV	934700	892600	446300	1339000	126470983	624841
Acenaphthene-d10-ISTD	1124341	Blank	1550000	669900	335000	1005000	126470972	1124341
Acenaphthene-d10-ISTD	1124341	LCS	1124000	669900	335000	1005000	126470973	1124341
Acenaphthene-d10-ISTD	1124341	LCS Dup	1144000	669900	335000	1005000	126470974	1124341
Phenanthrene-d10-ISTD	1124341	Blank	1577000	892600	446300	1339000	126470972	1124341
Phenanthrene-d10-ISTD	1124341	LCS	1107000	892600	446300	1339000	126470973	1124341
Phenanthrene-d10-ISTD	1124341	LCS Dup	1139000	892600	446300	1339000	126470974	1124341
Acenaphthene-d10-ISTD	2305623	Unknown	1184000	669900	335000	1005000	126470977	1124341
Phenanthrene-d10-ISTD	2305623	Unknown	1155000	892600	446300	1339000	126470977	1124341

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
Acenaphthene-d10-ISTD	624841	CCV	7.217	7.217	7.157	7.277	126470971	624841
Acenaphthene-d10-ISTD	624841	CCV	7.211	7.217	7.157	7.277	126470983	624841
Phenanthrene-d10-ISTD	624841	CCV	8.450	8.450	8.390	8.510	126470971	624841
Phenanthrene-d10-ISTD	624841	CCV	8.450	8.450	8.390	8.510	126470983	624841
Acenaphthene-d10-ISTD	1124341	Blank	7.211	7.217	7.157	7.277	126470972	1124341
Acenaphthene-d10-ISTD	1124341	LCS	7.211	7.217	7.157	7.277	126470973	1124341
Acenaphthene-d10-ISTD	1124341	LCS Dup	7.211	7.217	7.157	7.277	126470974	1124341
Phenanthrene-d10-ISTD	1124341	Blank	8.450	8.450	8.390	8.510	126470972	1124341
Phenanthrene-d10-ISTD	1124341	LCS	8.455	8.450	8.390	8.510	126470973	1124341
Phenanthrene-d10-ISTD	1124341	LCS Dup	8.456	8.450	8.390	8.510	126470974	1124341
Acenaphthene-d10-ISTD	2305623	Unknown	7.211	7.217	7.157	7.277	126470977	1124341
Phenanthrene-d10-ISTD	2305623	Unknown	8.456	8.450	8.390	8.510	126470977	1124341

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Nonylphenol	1124341	49.1	72.7	150	56.0 - 112	32.7 *	48.5 *	ug/L	38.9 *	30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
4-Nonylphenol-SURR	624841	CCV	28300	25000	ug/L	113	50.0 - 130	126470971
4-Nonylphenol-SURR	624841	CCV	29600	25000	ug/L	118	50.0 - 130	126470983
4-Nonylphenol-SURR	1124341	Blank	14700	25000	ug/L	58.8	50.0 - 130	126470972
4-Nonylphenol-SURR	1124341	LCS	16200	25000	ug/L	64.8	50.0 - 130	126470973
4-Nonylphenol-SURR	1124341	LCS Dup	24000	25000	ug/L	96.0	50.0 - 130	126470974
4-Nonylphenol-SURR	2305623	Unknown	32.6	29.0	ug/L	112	50.0 - 130	126470977

Analytical Set

1125008

EPA 625.1

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Parameter	PrepSet	Reading	MDL	MQL	Units	File
1,2,4,5-Tetrachlorobenzene	1123370	ND	1.03	1.03	ug/L	126472016
1,2,4-Trichlorobenzene	1123370	ND	0.941	1.00	ug/L	126472016
1,2-Dichlorobenzene	1123370	ND	1.04	5.00	ug/L	126472016
1,2-DPH (as azobenzene)	1123370	ND	0.238	1.00	ug/L	126472016
1,3-Dichlorobenzene	1123370	ND	0.954	5.00	ug/L	126472016
1,4-Dichlorobenzene	1123370	ND	1.01	5.00	ug/L	126472016
2,4,5-Trichlorophenol	1123370	ND	0.961	5.00	ug/L	126472016
2,4,6-Trichlorophenol	1123370	ND	1.24	2.00	ug/L	126472016
2,4-Dichlorophenol	1123370	ND	0.222	1.00	ug/L	126472016
2,4-Dimethylphenol	1123370	ND	0.536	1.00	ug/L	126472016
2,4-Dinitrophenol	1123370	ND	1.34	2.00	ug/L	126472016
2,4-Dinitrotoluene	1123370	ND	1.35	2.00	ug/L	126472016
2,6-Dinitrotoluene	1123370	ND	1.29	2.00	ug/L	126472016
2-Chloronaphthalene	1123370	ND	0.150	1.00	ug/L	126472016
2-Chlorophenol	1123370	ND	0.275	1.00	ug/L	126472016
2-Methylphenol (o-Cresol)	1123370	ND	8.48	10.0	ug/L	126472016
2-Nitrophenol	1123370	ND	0.554	1.00	ug/L	126472016
3&4-Methylphenol (m&p-Cresol)	1123370	ND	7.78	8.00	ug/L	126472016
3,3'-Dichlorobenzidine	1123370	ND	1.39	2.00	ug/L	126472016
4,6-Dinitro-2-methylphenol	1123370	ND	1.15	2.00	ug/L	126472016
4-Bromophenyl phenyl ether	1123370	ND	0.772	1.00	ug/L	126472016
4-Chlorophenyl phenyl ethe	1123370	ND	0.202	1.00	ug/L	126472016
4-Nitrophenol	1123370	ND	0.789	1.00	ug/L	126472016
Acenaphthene	1123370	ND	0.177	1.00	ug/L	126472016
Acenaphthylene	1123370	ND	0.240	1.00	ug/L	126472016
Aniline	1123370	ND	2470	2470	ug/L	126472016
Anthracene	1123370	ND	0.241	1.00	ug/L	126472016
Benzidine	1123370	ND	1.40	1.50	ug/L	126472016
Benzo(a)anthracene	1123370	ND	0.225	1.00	ug/L	126472016
Benzo(a)pyrene	1123370	ND	0.900	1.00	ug/L	126472016
Benzo(b)fluoranthene	1123370	ND	0.547	1.00	ug/L	126472016
Benzo(ghi)perylene	1123370	ND	0.881	1.00	ug/L	126472016
Benzo(k)fluoranthene	1123370	ND	0.252	1.00	ug/L	126472016
Benzyl Butyl phthalate	1123370	0.320	0.204	7.50	ug/L	126472016
Bis(2-chloroethoxy)methane	1123370	ND	0.277	1.00	ug/L	126472016
Bis(2-chloroethyl)ether	1123370	ND	0.348	1.00	ug/L	126472016
Bis(2-chloroisopropyl)ether	1123370	ND	0.738	1.00	ug/L	126472016
Bis(2-ethylhexyl)phthalate	1123370	ND	1.12	7.50	ug/L	126472016
Chrysene (Benzo(a)phenanthrene)	1123370	ND	0.289	1.00	ug/L	126472016
Dibenz(a,h)anthracene	1123370	ND	0.689	1.00	ug/L	126472016
Diethyl phthalate	1123370	ND	0.253	5.70	ug/L	126472016
Dimethyl phthalate	1123370	ND	0.540	4.80	ug/L	126472016
Di-n-butylphthalate	1123370	ND	0.978	7.50	ug/L	126472016
Di-n-octylphthalate	1123370	ND	1.92	2.00	ug/L	126472016
Fluoranthene(Benzo(j,k)fluorene)	1123370	ND	0.318	1.00	ug/L	126472016

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<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Fluorene	1123370	ND	0.275	1.00	ug/L	126472016
Hexachlorobenzene	1123370	ND	0.871	1.00	ug/L	126472016
Hexachlorobutadiene	1123370	ND	1.03	1.03	ug/L	126472016
Hexachlorocyclopentadiene	1123370	ND	0.536	1.00	ug/L	126472016
Hexachloroethane	1123370	ND	1.05	2.00	ug/L	126472016
Indeno(1,2,3-cd)pyrene	1123370	ND	0.596	1.00	ug/L	126472016
Isophorone	1123370	ND	0.429	1.00	ug/L	126472016
Naphthalene	1123370	ND	0.225	1.00	ug/L	126472016
Nitrobenzene	1123370	ND	0.271	1.00	ug/L	126472016
n-Nitrosodiethylamine	1123370	ND	0.747	1.00	ug/L	126472016
N-Nitrosodimethylamine	1123370	ND	0.542	1.00	ug/L	126472016
n-Nitroso-di-n-butylamine	1123370	ND	0.210	1.00	ug/L	126472016
N-Nitrosodi-n-propylamine	1123370	ND	0.425	1.00	ug/L	126472016
N-Nitrosodiphenylamine (as DPA	1123370	ND	0.404	1.00	ug/L	126472016
p-Chloro-m-Cresol (4-Chloro-3-me	1123370	ND	0.588	1.00	ug/L	126472016
Pentachlorobenzene	1123370	ND	0.977	1.00	ug/L	126472016
Pentachlorophenol	1123370	ND	0.960	5.00	ug/L	126472016
Phenanthrene	1123370	ND	0.269	1.00	ug/L	126472016
Phenol	1123370	ND	0.332	1.00	ug/L	126472016
Pyrene	1123370	ND	0.291	1.00	ug/L	126472016
Pyridine	1123370	ND	1.35	1.35	ug/L	126472016

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
1,2,4,5-Tetrachlorobenzene	48400	50000	ug/L	96.8	60.0 - 140	126472015
1,2,4-Trichlorobenzene	50400	50000	ug/L	101	61.0 - 130	126472015
1,2-Dichlorobenzene	45200	50000	ug/L	90.4	60.0 - 140	126472015
1,2-DPH (as azobenzene)	48600	50000	ug/L	97.2	60.0 - 140	126472015
1,3-Dichlorobenzene	49100	50000	ug/L	98.2	60.0 - 140	126472015
1,4-Dichlorobenzene	45300	50000	ug/L	90.6	60.0 - 140	126472015
2,4,5-Trichlorophenol	49800	50000	ug/L	99.6	69.0 - 130	126472015
2,4,6-Trichlorophenol	47800	50000	ug/L	95.6	69.0 - 130	126472015
2,4-Dichlorophenol	47300	50000	ug/L	94.6	64.0 - 130	126472015
2,4-Dimethylphenol	43300	50000	ug/L	86.6	58.0 - 130	126472015
2,4-Dinitrophenol	46400	50000	ug/L	92.8	39.0 - 173	126472015
2,4-Dinitrotoluene	45900	50000	ug/L	91.8	53.0 - 130	126472015
2,6-Dinitrotoluene	50200	50000	ug/L	100	68.0 - 137	126472015
2-Chloronaphthalene	52700	50000	ug/L	105	70.0 - 130	126472015
2-Chlorophenol	48600	50000	ug/L	97.2	55.0 - 130	126472015
2-Methylphenol (o-Cresol)	43400	50000	ug/L	86.8	60.0 - 140	126472015
2-Nitrophenol	49800	50000	ug/L	99.6	61.0 - 163	126472015
3&4-Methylphenol (m&p-Cresol)	41100	50000	ug/L	82.2	60.0 - 140	126472015
3,3'-Dichlorobenzidine	56400	50000	ug/L	113	18.0 - 213	126472015
4,6-Dinitro-2-methylphenol	43200	50000	ug/L	86.4	56.0 - 130	126472015
4-Bromophenyl phenyl ether	49000	50000	ug/L	98.0	70.0 - 130	126472015

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
4-Chlorophenyl phenyl ethe	46000	50000	ug/L	92.0	57.0 - 145	126472015
4-Nitrophenol	34100	50000	ug/L	68.2	35.0 - 135	126472015
Acenaphthene	48200	50000	ug/L	96.4	70.0 - 130	126472015
Acenaphthylene	50500	50000	ug/L	101	60.0 - 130	126472015
Aniline	41400	50000	ug/L	82.8	60.0 - 140	126472015
Anthracene	46800	50000	ug/L	93.6	58.0 - 130	126472015
Benzidine	25700	50000	ug/L	51.4	20.0 - 180	126472015
Benzo(a)anthracene	53100	50000	ug/L	106	42.0 - 133	126472015
Benzo(a)pyrene	52600	50000	ug/L	105	32.0 - 148	126472015
Benzo(b)fluoranthene	49800	50000	ug/L	99.6	42.0 - 140	126472015
Benzo(ghi)perylene	61200	50000	ug/L	122	13.0 - 195	126472015
Benzo(k)fluoranthene	53200	50000	ug/L	106	25.0 - 146	126472015
Benzyl Butyl phthalate	65700	50000	ug/L	131	43.0 - 140	126472015
Bis(2-chloroethoxy)methane	51200	50000	ug/L	102	52.0 - 164	126472015
Bis(2-chloroethyl)ether	49000	50000	ug/L	98.0	52.0 - 130	126472015
Bis(2-chloroisopropyl)ether	47200	50000	ug/L	94.4	63.0 - 139	126472015
Bis(2-ethylhexyl)phthalate	67700	50000	ug/L	135	43.0 - 137	126472015
Chrysene (Benzo(a)phenanthrene)	53500	50000	ug/L	107	44.0 - 140	126472015
Dibenz(a,h)anthracene	57200	50000	ug/L	114	13.0 - 200	126472015
Diethyl phthalate	44300	50000	ug/L	88.6	47.0 - 130	126472015
Dimethyl phthalate	48700	50000	ug/L	97.4	50.0 - 130	126472015
Di-n-butylphthalate	47800	50000	ug/L	95.6	52.0 - 130	126472015
Di-n-octylphthalate	72400	50000	ug/L	145	21.0 - 132 *	126472015
Fluoranthene(Benzo(j,k)fluorene)	45100	50000	ug/L	90.2	47.0 - 130	126472015
Fluorene	45800	50000	ug/L	91.6	70.0 - 130	126472015
Hexachlorobenzene	50300	50000	ug/L	101	38.0 - 142	126472015
Hexachlorobutadiene	41900	50000	ug/L	83.8	68.0 - 130	126472015
Hexachlorocyclopentadiene	58200	50000	ug/L	116	60.0 - 140	126472015
Hexachloroethane	42200	50000	ug/L	84.4	55.0 - 130	126472015
Indeno(1,2,3-cd)pyrene	56400	50000	ug/L	113	13.0 - 151	126472015
Isophorone	54600	50000	ug/L	109	52.0 - 180	126472015
Naphthalene	45000	50000	ug/L	90.0	70.0 - 130	126472015
Nitrobenzene	49200	50000	ug/L	98.4	54.0 - 158	126472015
n-Nitrosodiethylamine	52800	50000	ug/L	106	60.0 - 140	126472015
N-Nitrosodimethylamine	49200	50000	ug/L	98.4	60.0 - 140	126472015
n-Nitroso-di-n-butylamine	46000	50000	ug/L	92.0	60.0 - 140	126472015
N-Nitrosodi-n-propylamine	44900	50000	ug/L	89.8	59.0 - 170	126472015
N-Nitrosodiphenylamine (as DPA	42400	50000	ug/L	84.8	60.0 - 140	126472015
p-Chloro-m-Cresol (4-Chloro-3-me	43900	50000	ug/L	87.8	68.0 - 130	126472015
Pentachlorobenzene	45900	50000	ug/L	91.8	60.0 - 140	126472015
Pentachlorophenol	45500	50000	ug/L	91.0	42.0 - 152	126472015
Phenanthrene	43800	50000	ug/L	87.6	67.0 - 130	126472015
Phenol	43300	50000	ug/L	86.6	48.0 - 130	126472015
Pyrene	61200	50000	ug/L	122	70.0 - 130	126472015
Pyridine	55600	50000	ug/L	111	60.0 - 140	126472015

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DFTPP

Parameter	RefMass	Reading	%	Limits%	File
DFTPP Mass 127	625102 198	5830	54.7	40.0 - 60.0	126472013
DFTPP Mass 197	625102 198	0	0.0	0 - 1.00	126472013
DFTPP Mass 198	625102 198	10662	100.0	100 - 100	126472013
DFTPP Mass 199	625102 198	719	6.7	5.00 - 9.00	126472013
DFTPP Mass 275	625102 198	3008	28.2	10.0 - 30.0	126472013
DFTPP Mass 365	625102 198	568	5.3	1.00 - 100	126472013
DFTPP Mass 441	625102 443	968	54.8	0 - 100	126472013
DFTPP Mass 442	625102 198	9092	85.3	40.0 - 100	126472013
DFTPP Mass 443	625102 442	1766	19.4	17.0 - 23.0	126472013
DFTPP Mass 51	625102 198	3355	31.5	30.0 - 60.0	126472013
DFTPP Mass 68	625102 69.0	2	0.1	0 - 2.00	126472013
DFTPP Mass 69	625102 198	3774	35.4	0 - 100	126472013
DFTPP Mass 70	625102 69.0	19	0.5	0 - 2.00	126472013

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,2,4,5-Tetrachlorobenzene	1123370	8.56	7.91	12.5	27.5 - 85.5	68.5	63.3	ug/L	7.89	50.0
1,2,4-Trichlorobenzene	1123370	7.85	7.36	12.5	44.0 - 142	62.8	58.9	ug/L	6.41	50.0
1,2-Dichlorobenzene	1123370	7.39	7.33	12.5	23.0 - 81.8	59.1	58.6	ug/L	0.850	50.0
1,2-DPH (as azobenzene)	1123370	10.1	10.8	12.5	12.6 - 110	80.8	86.4	ug/L	6.70	50.0
1,3-Dichlorobenzene	1123370	7.20	6.99	12.5	21.1 - 80.5	57.6	55.9	ug/L	3.00	50.0
1,4-Dichlorobenzene	1123370	7.05	6.92	12.5	21.4 - 76.9	56.4	55.4	ug/L	1.79	50.0
2,4,5-Trichlorophenol	1123370	8.80	10.9	12.5	51.3 - 109	70.4	87.2	ug/L	21.3	50.0
2,4,6-Trichlorophenol	1123370	12.9	10.7	12.5	37.0 - 144	103	85.6	ug/L	18.5	58.0
2,4-Dichlorophenol	1123370	10.0	9.85	12.5	39.0 - 135	80.0	78.8	ug/L	1.51	50.0
2,4-Dimethylphenol	1123370	4.48	3.06	12.5	23.0 - 120	35.8	24.5	ug/L	37.5	68.0
2,4-Dinitrophenol	1123370	7.87	10.0	12.5	0.100 - 191	63.0	80.0	ug/L	23.8	132
2,4-Dinitrotoluene	1123370	7.76	10.3	12.5	39.0 - 139	62.1	82.4	ug/L	28.1	42.0
2,6-Dinitrotoluene	1123370	10.6	11.2	12.5	50.0 - 158	84.8	89.6	ug/L	5.50	48.0
2-Chloronaphthalene	1123370	11.0	9.44	12.5	60.0 - 120	88.0	75.5	ug/L	15.3	24.0
2-Chlorophenol	1123370	9.81	9.73	12.5	23.0 - 134	78.5	77.8	ug/L	0.896	61.0
2-Methylphenol (o-Cresol)	1123370	8.90	8.25	12.5	38.9 - 76.1	71.2	66.0	ug/L	7.58	50.0
2-Nitrophenol	1123370	10.3	9.68	12.5	29.0 - 182	82.4	77.4	ug/L	6.26	55.0
3&4-Methylphenol (m&p-Cresol)	1123370	7.92	7.53	12.5	33.0 - 70.4	63.4	60.2	ug/L	5.18	50.0
3,3'-Dichlorobenzidine	1123370	8.29	8.76	12.5	0.100 - 262	66.3	70.1	ug/L	5.57	108
4,6-Dinitro-2-methylphenol	1123370	9.49	9.53	12.5	0.100 - 181	75.9	76.2	ug/L	0.394	203
4-Bromophenyl phenyl ether	1123370	10.5	9.96	12.5	53.0 - 127	84.0	79.7	ug/L	5.25	43.0
4-Chlorophenyl phenyl ethe	1123370	8.68	8.26	12.5	25.0 - 158	69.4	66.1	ug/L	4.87	61.0
4-Nitrophenol	1123370	3.31	3.46	12.5	0.100 - 132	26.5	27.7	ug/L	4.43	131
Acenaphthene	1123370	9.39	9.40	12.5	47.0 - 145	75.1	75.2	ug/L	0.133	48.0
Acenaphthylene	1123370	9.98	9.91	12.5	33.0 - 145	79.8	79.3	ug/L	0.629	74.0
Aniline	1123370	6760	7050	12500	70.0 - 130	54.1 *	56.4 *	ug/L	4.16	50.0
Anthracene	1123370	9.54	10.3	12.5	27.0 - 133	76.3	82.4	ug/L	7.69	66.0
Benzidine	1123370	0.830	0.290	12.5	0.100 - 36.9	6.64	2.32	ug/L	96.4 *	90.0
Benzo(a)anthracene	1123370	10.1	10.6	12.5	33.0 - 143	80.8	84.8	ug/L	4.83	53.0

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LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Benzo(a)pyrene	1123370	9.62	10.3	12.5	17.0 - 163	77.0	82.4	ug/L	6.78	72.0
Benzo(b)fluoranthene	1123370	9.52	9.98	12.5	24.0 - 159	76.2	79.8	ug/L	4.62	71.0
Benzo(ghi)perylene	1123370	11.4	11.7	12.5	0.100 - 219	91.2	93.6	ug/L	2.60	97.0
Benzo(k)fluoranthene	1123370	10.1	11.8	12.5	11.0 - 162	80.8	94.4	ug/L	15.5	63.0
Benzyl Butyl phthalate	1123370	13.3	14.0	12.5	0.100 - 152	106	112	ug/L	5.50	60.0
Bis(2-chloroethoxy)methane	1123370	10.6	10.1	12.5	33.0 - 184	84.8	80.8	ug/L	4.83	54.0
Bis(2-chloroisopropyl)ether	1123370	9.61	9.45	12.5	12.0 - 158	76.9	75.6	ug/L	1.70	108
Bis(2-chloroisopropyl)ether	1123370	9.85	9.68	12.5	36.0 - 166	78.8	77.4	ug/L	1.79	76.0
Bis(2-ethylhexyl)phthalate	1123370	14.4	15.7	12.5	8.00 - 158	115	126	ug/L	9.13	82.0
Chrysene (Benzo(a)phenanthrene)	1123370	10.2	10.9	12.5	17.0 - 168	81.6	87.2	ug/L	6.64	87.0
Dibenz(a,h)anthracene	1123370	10.6	10.6	12.5	0.100 - 227	84.8	84.8	ug/L	0	126
Diethyl phthalate	1123370	10.2	10.3	12.5	0.100 - 120	81.6	82.4	ug/L	0.976	100
Dimethyl phthalate	1123370	10.7	10.9	12.5	0.100 - 120	85.6	87.2	ug/L	1.85	183
Di-n-butylphthalate	1123370	10.9	11.3	12.5	1.00 - 120	87.2	90.4	ug/L	3.60	47.0
Di-n-octylphthalate	1123370	12.7	14.1	12.5	4.00 - 146	102	113	ug/L	10.2	69.0
Fluoranthene(Benzo(j,k)fluorene)	1123370	8.22	9.10	12.5	26.0 - 137	65.8	72.8	ug/L	10.1	66.0
Fluorene	1123370	9.42	8.92	12.5	59.0 - 121	75.4	71.4	ug/L	5.45	38.0
Hexachlorobenzene	1123370	9.89	9.38	12.5	0.100 - 152	79.1	75.0	ug/L	5.32	55.0
Hexachlorobutadiene	1123370	5.50	5.15	12.5	24.0 - 120	44.0	41.2	ug/L	6.57	62.0
Hexachlorocyclopentadiene	1123370	4.95	5.88	12.5	3.97 - 68.7	39.6	47.0	ug/L	17.1	50.0
Hexachloroethane	1123370	6.02	5.94	12.5	40.0 - 120	48.2	47.5	ug/L	1.46	52.0
Indeno(1,2,3-cd)pyrene	1123370	10.6	10.6	12.5	0.100 - 171	84.8	84.8	ug/L	0	99.0
Isophorone	1123370	9.51	9.45	12.5	21.0 - 196	76.1	75.6	ug/L	0.659	93.0
Naphthalene	1123370	8.38	8.02	12.5	21.0 - 133	67.0	64.2	ug/L	4.27	65.0
Nitrobenzene	1123370	9.82	9.26	12.5	35.0 - 180	78.6	74.1	ug/L	5.89	62.0
n-Nitrosodiethylamine	1123370	9.08	9.19	12.5	18.0 - 100	72.6	73.5	ug/L	1.23	50.0
N-Nitrosodimethylamine	1123370	6.81	7.02	12.5	30.2 - 74.9	54.5	56.2	ug/L	3.07	50.0
n-Nitroso-di-n-butylamine	1123370	9.13	9.24	12.5	48.4 - 98.5	73.0	73.9	ug/L	1.23	50.0
N-Nitrosodi-n-propylamine	1123370	9.57	9.45	12.5	0.100 - 230	76.6	75.6	ug/L	1.31	87.0
N-Nitrosodiphenylamine (as DPA	1123370	11.2	10.9	12.5	49.3 - 94.2	89.6	87.2	ug/L	2.71	50.0
p-Chloro-m-Cresol (4-Chloro-3-me	1123370	9.26	9.52	12.5	22.0 - 147	74.1	76.2	ug/L	2.79	70.0
Pentachlorobenzene	1123370	7.91	7.85	12.5	39.3 - 93.7	63.3	62.8	ug/L	0.793	50.0
Pentachlorophenol	1123370	9.96	10.9	12.5	14.0 - 176	79.7	87.2	ug/L	8.99	86.0
Phenanthrene	1123370	10.4	10.7	12.5	54.0 - 120	83.2	85.6	ug/L	2.84	39.0
Phenol	1123370	4.83	4.79	12.5	5.00 - 120	38.6	38.3	ug/L	0.780	64.0
Pyrene	1123370	12.6	13.3	12.5	52.0 - 120	101	106	ug/L	4.83	49.0
Pyridine	1123370	7.99	6.84	12.5	11.2 - 50.6	63.9 *	54.7 *	ug/L	15.5	50.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	625306	CCV	44300	100000	ug/L	44.3	10.0 - 150	126472015
2-Fluorophenol-SURR	625306	CCV	53500	100000	ug/L	53.5	10.0 - 150	126472015
4-Terphenyl-d14-SURR	625306	CCV	56500	50000	ug/L	113	30.0 - 150	126472015
Nitrobenzene-d5-SURR	625306	CCV	53100	50000	ug/L	106	30.0 - 150	126472015
Phenol-d6-SURR	625306	CCV	49000	100000	ug/L	49.0	10.0 - 150	126472015

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Surrogate								
Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	1123370	Blank	54.5	100	ug/L	54.5	10.0 - 150	126472016
2,4,6-Tribromophenol	1123370	LCS	50.5	100	ug/L	50.5	10.0 - 150	126472017
2,4,6-Tribromophenol	1123370	LCS Dup	54.4	100	ug/L	54.4	10.0 - 150	126472018
2-Fluorophenol-SURR	1123370	Blank	35000	100000	ug/L	35.0	10.0 - 150	126472016
2-Fluorophenol-SURR	1123370	LCS	33200	100000	ug/L	33.2	10.0 - 150	126472017
2-Fluorophenol-SURR	1123370	LCS Dup	31900	100000	ug/L	31.9	10.0 - 150	126472018
4-Terphenyl-d14-SURR	1123370	Blank	37600	50000	ug/L	75.2	30.0 - 150	126472016
4-Terphenyl-d14-SURR	1123370	LCS	22800	50000	ug/L	45.6	30.0 - 150	126472017
4-Terphenyl-d14-SURR	1123370	LCS Dup	23700	50000	ug/L	47.4	30.0 - 150	126472018
Nitrobenzene-d5-SURR	1123370	Blank	35200	50000	ug/L	70.4	30.0 - 150	126472016
Nitrobenzene-d5-SURR	1123370	LCS	19800	50000	ug/L	39.6	30.0 - 150	126472017
Nitrobenzene-d5-SURR	1123370	LCS Dup	18500	50000	ug/L	37.0	30.0 - 150	126472018
Phenol-d6-SURR	1123370	Blank	26200	100000	ug/L	26.2	10.0 - 150	126472016
Phenol-d6-SURR	1123370	LCS	24500	100000	ug/L	24.5	10.0 - 150	126472017
Phenol-d6-SURR	1123370	LCS Dup	24200	100000	ug/L	24.2	10.0 - 150	126472018
2,4,6-Tribromophenol	2305623	Unknown	62.7	106	ug/L	59.2	10.0 - 150	126472019
2-Fluorophenol-SURR	2305623	Unknown	40.7	106	ug/L	38.4	10.0 - 150	126472019
4-Terphenyl-d14-SURR	2305623	Unknown	43.4	53.2	ug/L	81.6	30.0 - 150	126472019
Nitrobenzene-d5-SURR	2305623	Unknown	35.0	53.2	ug/L	65.8	30.0 - 150	126472019
Phenol-d6-SURR	2305623	Unknown	31.0	106	ug/L	29.2	10.0 - 150	126472019

Analytical Set

1123135

SM 4500-P E-2011

AWRL/LOQ C											
<u>Parameter</u>		<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>		<u>File</u>			
Phosphorus (as P), total		0.0639	0.060	mg/L	106	70.0 - 130		126425460			
Blank											
<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>			<u>File</u>			
Phosphorus (as P), total	1123135	ND	0.010	0.030	mg/L			126425459			
CCV											
<u>Parameter</u>		<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>		<u>File</u>			
Phosphorus (as P), total		0.305	0.300	mg/L	102	90.0 - 110		126425461			
Phosphorus (as P), total		0.300	0.300	mg/L	100	90.0 - 110		126425476			
Phosphorus (as P), total		0.300	0.300	mg/L	100	90.0 - 110		126425489			
LCS Dup											
<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>		<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Phosphorus (as P), total	1123135	0.297	0.319		0.300	80.0 - 120	99.0	106	mg/L	7.14	20.0
MSD											
<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Phosphorus (as P), total	2305933	0.128	0.134	0.100	0.150	70.0 - 130	18.7 *	22.7 *	mg/L	19.4	20.0

Analytical Set

1123173

SM 2320 B-2011

Email: Kilgore.ProjectManagement@spllabs.com



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QUALITY CONTROL



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SPAC-R

SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1106094

Printed 06/26/2024

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Alkalinity (as CaCO3)	1123173	ND	1.00	1.00	mg/L	126425785

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Alkalinity (as CaCO3)	27.3	25.0	mg/L	109	90.0 - 110	126425784
Total Alkalinity (as CaCO3)	24.9	25.0	mg/L	99.6	90.0 - 110	126425798
Total Alkalinity (as CaCO3)	24.9	25.0	mg/L	99.6	90.0 - 110	126425811

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Total Alkalinity (as CaCO3)	2305590	106	107	mg/L	0.939	20.0
Total Alkalinity (as CaCO3)	2305698	136	136	mg/L	0	20.0

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Alkalinity (as CaCO3)	26.9	25.0	mg/L	108	90.0 - 110	126425783

Mat. Spike

Parameter	Sample	Spike	Unknown	Known	Units	Recovery %	Limits %	File
Total Alkalinity (as CaCO3)	2305590	130	107	25.0	mg/L	92.0	70.0 - 130	126425788
Total Alkalinity (as CaCO3)	2305698	159	136	25.0	mg/L	92.0	70.0 - 130	126425801

Analytical Set 1123591

SM 5220 D-2011

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Chemical Oxygen Demand	434	400	mg/L	108	90.0 - 110	126436305

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Chemical Oxygen Demand	2305419	33.6	33.6	mg/L	0	20.0
Chemical Oxygen Demand	2305557	21.9	21.9	mg/L	0	20.0

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File
Chemical Oxygen Demand	1123591	216	200	mg/L	108	90.0 - 110	126436306

Mat. Spike

Parameter	Sample	Spike	Unknown	Known	Units	Recovery %	Limits %	File
Chemical Oxygen Demand	2305419	245	33.6	200	mg/L	106	80.0 - 120	126436309
Chemical Oxygen Demand	2305557	222	21.9	200	mg/L	100	80.0 - 120	126436312

Analytical Set 1123697

SM 2130 B-2011

AWRL/LOQ C

Parameter	Reading	Known	Units	Recover%	Limits%	File
Turbidity	0.350	0.300	NTU	117	70.0 - 130	126440048

Email: Kilgore.ProjectManagement@spllabs.com



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QUALITY CONTROL



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Brownsville, TX 78521

Project
1106094

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Blank								
<i>Parameter</i>	<i>PrepSet</i>	<i>Reading</i>	<i>MDL</i>	<i>MQL</i>	<i>Units</i>	<i>File</i>		
Turbidity	1123697	ND	0.300	0.300	NTU	126440046		
Duplicate								
<i>Parameter</i>	<i>Sample</i>		<i>Result</i>	<i>Unknown</i>		<i>Unit</i>	<i>RPD</i>	<i>Limit%</i>
Turbidity	2305623		3.40	3.04		NTU	11.2	20.0
Turbidity	2307012		0.580	0.520		NTU	10.9	20.0
Mat. Spike								
<i>Parameter</i>	<i>Sample</i>	<i>Spike</i>	<i>Unknown</i>	<i>Known</i>	<i>Units</i>	<i>Recovery %</i>	<i>Limits %</i>	<i>File</i>
Turbidity	2305623	44.5	3.04	40.0	NTU	104	70.0 - 130	126440052
Turbidity	2307012	41.2	0.520	40.0	NTU	102	70.0 - 130	126440065
Standard								
<i>Parameter</i>	<i>Sample</i>	<i>Reading</i>	<i>Known</i>	<i>Units</i>	<i>Recover%</i>	<i>Limits%</i>	<i>File</i>	
Turbidity	1123697	10.1	10.0	NTU	101	90.0 - 110	126440047	
Turbidity	1123697	101	100	NTU	101	90.0 - 110	126440049	
Turbidity	1123697	10.0	10.0	NTU	100	90.0 - 110	126440060	
Turbidity	1123697	10.4	10.0	NTU	104	90.0 - 110	126441062	

* Out RPD is Relative Percent Difference: $\text{abs}(r_1 - r_2) / \text{mean}(r_1, r_2) * 100\%$

Recover% is Recovery Percent: $\text{result} / \text{known} * 100\%$

CCV - Continuing Calibration Verification (same standard used to prepare the curve; typically a mid-range concentration; verifies the continued validity of the calibration curve); Blank - Method Blank (reagent water or other blank matrices that contains all reagents except standard(s) and is processed simultaneously with and under the same conditions as samples; carried through preparation and analytical procedures exactly like a sample; monitors); MSD - Matrix Spike Duplicate (replicate of the matrix spike; same solution and amount of target analyte added to the MS is added to a third aliquot of sample; quantifies matrix bias and precision.); LCS Dup - Laboratory Control Sample Duplicate (replicate LCS; analyzed when there is insufficient sample for duplicate or MSD; quantifies accuracy and precision.); BFB - Bromofluorobenzene, GC/MS Tuning Compound (mass intensity used as tuning acceptance criteria.); Surrogate - Surrogate (mimics the analyte of interest but is unlikely to be found in environmental samples; added to analytical samples for QC purposes. **ANSI/ASQC E4 1994 Ref #4 TRADE QA Resources Guide.); IS Areas - Internal Standard Area (The area of the internal standard relative to a check standard. Internal Standard is a known concentration of an analyte(s) that is not a sample component or standard that is added to the sample and standard and is used to measure the relative responses of other analytes in the same sample or standard.); IS RetTime - Internal Standard Retention Time (the time the internal standard comes off the column. Internal Standard is a known concentration of an analyte(s) that is not a sample component or standard that is added to the sample and standard and is used to measure the relative responses of other analytes in the same sample or standard.); ICV - Initial Calibration Verification; CCB - Continuing Calibration Blank; AWRL/LOQ C - Ambient Water Reporting Limit/LOQ Check Std; MRL Check - Minimum Reporting Limit Check Std; LCS - Laboratory Control Sample (reagent water or other blank matrices that is spiked with a known quantity of target analyte(s) and carried through preparation and analytical procedures exactly like a sample; typically a mid-range concentration; verifies that bias and precision of the analytical process are within control limits; determines usability of the data.); LDR - Linear Dynamic Range Standard; MS - Matrix Spike (same solution and amount of target analyte added to the LCS is added to a second aliquot of sample; quantifies matrix bias.); DFTPP - GC/MS Tuning Compound

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SPACE
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Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

SPAC-R
194

Lab Number

1106094

PO Number

1106094 Mandatory

Phone

956/543-6688

Waste Water

RETENTION POND

☐ Hand Delivered by Client to Region or LAB

Matrix: Non-Potable Water

Sample Collection Start

Date: 6/16/24 Time: 13:30

Sampler Printed Name: CAROLYN WOOD

Sampler Affiliation: SPAC

Sampler Signature: [Signature]

Samples Radioactive? ☐Samples Contains Dioxin? ☐Samples Biological Hazard? ☐
☒ On Site Testing

NELAC

CI20

CI2 Res., Total(Onsite)Spec Mid

SM 4500-CI G-2011

CI2 Res., Total(Onsite)Spec Mid

Collected By: CW Date: 6/16/24 Time: 13:30 Analyzed By: RDX Date: 6/16/24 Time: 13:40

Results: NEGATIVE Units: mg/L Temp: 37.8 C Duplicate: NEGATIVE Units: mg/L Temp: 37.1 C

R1: 0.00 R2: 0.00 QC R1: 0.00 QC R2: 0.00

☐ Field CI2 Check for CNa

Field CI2 Check for CNa

Collected By: CW Date: 6/16/24 Time: 13:30 Analyzed By: RDX Date: 6/16/24 Time: 13:40

Results: NEGATIVE Units: mg/L Temp: 37.8 C Duplicate: NEGATIVE Units: mg/L Temp: 37.1 C

R1: 0.00 R2: 0.00 QC R1: 0.00 QC R2: 0.00

NELAC Short Hold

Cr6P

Hex Cr, Field Preservation

SM 3500-Cr B-2011 CAS:18540-29-9 (1.00 days)



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Hex Cr, Field Preservation

Collected By CW Date 6/6/24 Time 13:30 Analyzed By ROL Date 6/6/24 Time 13:33

NELAC Short Hold

DO

Dissolved Oxygen Onsite

SM 4500-O G-2016 (0.0104 days)

Dissolved Oxygen Onsite

Collected By CW Date 6/6/24 Time 13:30 Analyzed By ROL Date 6/6/24 Time 13:35

Results 7.07 Units mg/L Temp. 39.0 C Duplicate 7.15 Units mg/L Temp. 39.0 C

NELAC Short Hold

pH

pH (Onsite)

SM 4500-H+ B-2011 (0.0104 days)

pH (Onsite)

Collected By CW Date 6/6/24 Time 13:30 Analyzed By ROL Date 6/6/24 Time 13:38

Results 8.60 Units mg/L Temp. 39.0 C Duplicate 7.15 Units mg/L Temp. 39.0 C

S2Cr Field Sulfide Check for CNa

Field Sulfide Check for CNa

Collected By CW Date 6/6/24 Time 13:30 Analyzed By ROL Date 6/6/24 Time 13:43

Results NEGATIVE Units --- Temp. 39.0 C Duplicate NEGATIVE Units --- Temp. 39.0 C

R1

R2

QC R1

QC R2

NELAC Short Hold

Temp

Temperature (onsite)

SM 2550 B - 2010 (0.0104 days)



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Temperature (onsite)

Collected By CW Date 6/6/19 Time 13:30 Analyzed By BC Date 13/35 Time 13:40

Results 38.0 Units °C Duplicate 38.0 Units °C

2 Amber Glass Qt w/Teflon lined lid

NELAC	ID2S	Table D-1/ D-2 Semivolatiles Exp	EPA 625.1 (7.00 days)
NELAC	PCB	Polychlorinated Biphenyls	EPA 608.3 (7.00 days)

2 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid

NELAC Short Hold	SAAE	Acrolein/Acrylonitrile Exp.	EPA 624.1 (3.00 days)

2 H2SO4 to pH <2 GIQt w/Tef-lined lid

NYPE	Nonyl Phenol Expansion	ASTM D7065-11 (14.0 days)

1 H2SO4 to pH <2 GIQt w/Tef-lined lid

NELAC	HEM	Oil and Grease (HEM)	EPA 1664B (HEM) (28.0 days)

1 Polyethylene 1/2 gal (White)

NELAC Short Hold	BOD	Biochemical Oxygen Demand (BOD5)	SM 5210 B-2016 CAS:1026-3 (2.04 days)
NELAC Short Hold	BODc	BOD Carbonaceous	SM 5210 B-2016 (TCMP Inhibitor) (2.04 days)
NELAC	TSS	Total Suspended Solids	SM 2540 D-2015 (7.00 days)

0 Z -- No bottle required

	CKLM	Check Limits	
NELAC Short Hold	Cr+3	Trivalent Chromium	Calculation CAS:16065-83-1 (1.00 days)

1 HNO3 to pH <2 Polyethylene 500 mL for Metals

NELAC	*AgM	Silver, Total	EPA 200.8 5.4 CAS:7440-22-4 (180 days)
NELAC	*AlM	Aluminum, Total	EPA 200.8 5.4 CAS:7429-90-5 (180 days)



RGV Region: 2401 Village Dr. Suite C Brownsville, TX 78521

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SPACE X
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1 Rocket Rd
Brownsville, TX 78521
NELAC

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NELAC	*AsM	Arsenic, Total	EPA 200.8 5.4 CAS:7440-38-2 (180 days)
NELAC	*BaM	Barium, Total	EPA 200.8 5.4 CAS:7440-39-3 (180 days)
NELAC	*BeM	Beryllium, Total	EPA 200.8 5.4 CAS:7440-41-7 (180 days)
NELAC	*CdM	Cadmium, Total	EPA 200.8 5.4 CAS:7440-43-9 (180 days)
NELAC	*CrM	Chromium, Total	EPA 200.8 5.4 CAS:7440-47-3 (180 days)
NELAC	*CuM	Copper, Total	EPA 200.8 5.4 CAS:7440-50-8 (180 days)
NELAC	*Hg	Mercury, Total	EPA 245.1 3 CAS:7439-97-6 (28.0 days)
NELAC	*NiM	Nickel, Total	EPA 200.8 5.4 CAS:7440-02-0 (180 days)
NELAC	*PbM	Lead, Total	EPA 200.8 5.4 CAS:7439-92-1 (180 days)
NELAC	*SbM	Antimony, Total	EPA 200.8 5.4 CAS:7440-36-0 (180 days)
NELAC	*SeM	Selenium, Total	EPA 200.8 5.4 CAS:7782-49-2 (180 days)
NELAC	*TlM	Thallium, Total	EPA 200.8 5.4 CAS:7440-28-0 (180 days)
NELAC	*ZnM	Zinc, Total	EPA 200.8 5.4 CAS:7440-66-6 (180 days)
	301L	Liquid Metals Digestion	EPA 200.2 2.8 (180 days)
NELAC	747L	Mercury Liquid Metals Digestion	EPA 245.1 3 (28.0 days)

3 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)

Short Hold ID2V Table D-1/D-2 Volatile Expansion EPA 624.1 (3.00 days)

2 H2SO4 to pH <2 250 ml Polyethylene

NELAC	COD	Chemical Oxygen Demand	SM 5220 D-2011 (28.0 days)
NELAC	NH ₄ N	Ammonia Nitrogen	EPA 350.1 2 (28.0 days)
	OrgN	Nitrogen, Total Organic (as N)	EPA 351.2 minus EPA 350.1 (28.0 days)
NELAC	TKN	Total Kjeldahl Nitrogen	EPA 351.2 2 CAS:7727-37-9 (28.0 days)
NELAC	TPWB	Phosphorus (as P), total	SM 4500-P E-2011 CAS:7723-14-0 (28.0 days)

1 H2SO4 to pH <2 Glass 250 mLw/Teflon lined lid

NELAC TOCL Total Organic Carbon SM 5310 C-2014 (28.0 days)



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2 NaOH to pH >12 Polyethylene 250 mL/amber

NELAC	CN ⁻	Cyanide, total	SM 4500-CN ⁻ E-2016 (14.0 days)
NELAC	CN ⁻ A	Cyanide - Available/Amenable	SM 4500-CN ⁻ G-2016 (14.0 days)
NELAC	CNCl	Cyanide After Chlorination	SM 4500-CN ⁻ G-2016 (14.0 days)

1 Polyethylene Quart

NELAC	ICL	Chloride	EPA 300.0 2.1 (28.0 days)
NELAC	IFIL	Fluoride	EPA 300.0 2.1 (28.0 days)
NELAC Short Hold	IN3L	Nitrate-Nitrogen Total	EPA 300.0 2.1 CAS:14797-55-8 (2.00 days)
NELAC	IS4L	Sulfate	EPA 300.0 2.1 (28.0 days)
NELAC	AlkT	Total Alkalinity (as CaCO ₃)	SM 2320 B-2011 (14.0 days)
NELAC Short Hold	Cr+6	Hexavalent Chromium	SM 3500-Cr B-2011 CAS:18540-29-9 (1.00 days)
NELAC	TDS	Total Dissolved Solids	SM 2540 C-2015 (7.00 days)

Ambient Conditions/Comments

Date	Time	Relinquished	Received
6/06/24	13:30	Printed Name: CAROLYN WOOD Signature: [Signature] Affiliation: SPL	Printed Name: RAE LEON Signature: [Signature] Affiliation: SPL
6/06/24	17:30	Printed Name: RAE LEON Signature: [Signature] Affiliation: SPL	Printed Name: [Blank] Signature: FedEx Affiliation: [Blank]
6/07/24	10:00	Printed Name: [Blank] Signature: FedEx Affiliation: [Blank]	Printed Name: Whitwood Signature: [Signature] Affiliation: SPL
		Printed Name: [Blank] Signature: [Blank] Affiliation: [Blank]	Printed Name: [Blank] Signature: [Blank] Affiliation: [Blank]



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194

Sample Received on Ice? ☒ Yes ☐ No
Cooler/Sample Secure? ☒ Yes ☐ No If Shipped: Tracking Number & Temp - See Attached

The accredited column designates accreditation by A - A2LA, N - NELAP, or Z - not listed under scope of accreditation. Unless otherwise specified, ANA-LAB shall provide these ordered services pursuant to our Standard Terms & Conditions Agreement (available for download from the welcome page at <<http://www.ana-lab.com>>). ANA-Lab personnel collect samples as specified by ANA-Lab SOP #000323.

Comments



1106094 CoC Print Group 001 of 001

FedEx Express Package US Airbill

1 From
Date: 6-6-24
Sender's Name: [Redacted]
Company: [Redacted]
Address: [Redacted]
City: [Redacted] State: TX ZIP: 75662

2 Your Internal Billing Reference

3 To Recipient's Name: [Redacted]
Company: [Redacted]
Address: [Redacted]
City: [Redacted] State: TX ZIP: 75662

4 TRK# 8171 3103 3424

SHIP DATE: 06JUN24
ACTWT: 58.75 LB
CAD: 6994257/SSFE2521
DIM: 24x14x13 IN
BILL THIRD PARTY

TO LOGIN
SPL
2600 DUDLEY RD
KILGORE TX 75662

XS GGGG

FRI - 07 JUN 10:30A
PRIORITY OVERNIGHT

75662
3HV

6/7 1030 AMV
Date Time Tech
Temp: 1.2 1.1 C
Therm#: 7242 Corr Fact: -0.1 C

8171 3103 3424

SPAC-R

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SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1092339

Report Date: 02/28/2024
Printed: 04/05/2024

RESULTS

Sample Results

2274163 Water/WQP/Annual

Received: 02/16/2024

Drinking Water

Collected by: Client
Taken: 02/15/2024

SPACEX
15:00:00

PO:

EPA 200.7 4.4

Prepared: 1105616 02/22/2024 10:00:00 Analyzed 1105831 02/22/2024 15:15:00 KBI

Parameter	Results	Units	RL	Flags	CAS	Bottle
z Calcium	80.1	mg/L	0.500		7440-70-2	03
NELAC Iron, Total	0.0798	mg/L	0.025		7439-89-6	03
NELAC Sodium	174	mg/L	0.500		7440-23-5	03

EPA 200.8 5.4

Prepared: 1105616 02/22/2024 10:00:00 Analyzed 1105841 02/22/2024 21:43:00 JC2

Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC Manganese, Total	0.00119	mg/L	0.001		7439-96-5	03

EPA 300.0 2.1

Prepared: 1105412 02/20/2024 19:05:00 Analyzed 1105412 02/20/2024 19:05:00 NAZ

Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC Chloride	213	mg/L	30.0			01
NELAC Sulfate	342	mg/L	30.0			01

SM 2320 B-2011

Prepared: 1106718 02/28/2024 09:42:00 Analyzed 1106718 02/28/2024 09:42:00 KNI

Parameter	Results	Units	RL	Flags	CAS	Bottle
z Total Alkalinity (as CaCO3)	124	mg/L	1.00			01

SM 2340 C-2011

Prepared: 1105896 02/22/2024 14:11:00 Analyzed 1105896 02/22/2024 14:11:00 SLF

Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC Total Hardness (as CaCO3)	310	mg/L	20			02

SM 2510 B-2011

Prepared: 1105536 02/21/2024 13:30:00 Analyzed 1105536 02/21/2024 13:30:00 ALH

Parameter	Results	Units	RL	Flags	CAS	Bottle



SPAC-R

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SPACEX
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Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1092339

Report Date: 02/28/2024
Printed: 04/05/2024

2274163 Water/WQP/Annual

Received: 02/16/2024

Drinking Water

Collected by: Client
Taken: 02/15/2024

SPACEX
15:00:00

PO:

SM 2510 B-2011

Prepared: 1105536 02/21/2024 13:30:00 Analyzed 1105536 02/21/2024 13:30:00 ALH

Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC Lab Spec. Conductance at 25 C	1430	umhos/cm				01

SM 2540 C-2015

Prepared: 1105436 02/20/2024 12:00:00 Analyzed 1105436 02/20/2024 12:00:00 JMB

Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC Total Dissolved Solids	700	mg/L	50.0			01

SM 4500-H+ B-2011

Prepared: 1105537 02/21/2024 15:30:00 Analyzed 1105537 02/21/2024 15:30:00 ALH

Parameter	Results	Units	RL	Flags	CAS	Bottle
z Laboratory pH	8.2@20C	SU	2.00			01

Sample Preparation

2274163 Water/WQP/Annual

Received: 02/16/2024

02/15/2024

Prepared: 02/20/2024 09:39:30 Calculated 02/20/2024 09:39:30 CAL

z Environmental Fee (per Project) Verified

EPA 200.2 2.8

Prepared: 1105616 02/22/2024 10:00:00 Analyzed 1105616 02/22/2024 10:00:00 HLT

z Liquid Metals Digestion	50/50	ml				02

SM 2540 C-2015

Prepared: 1105103 02/20/2024 12:00:00 Analyzed 1105103 02/20/2024 12:00:00 JMB

NELAC Total Dissolved Solids Started



SPAC-R

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SPACEX
Rodolfo Longoria
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1 Rocket Rd
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Project
1092339

Report Date: 02/28/2024
Printed: 04/05/2024

Qualifiers:

We report results on an As Received (or Wet) basis unless marked Dry Weight.

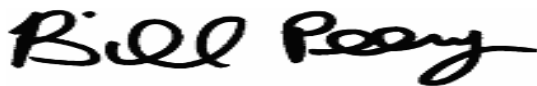
Unless otherwise noted, testing was performed at SPL, Inc.- Kilgore laboratory which holds International, Federal, and state accreditations. Please see our Websites for details.

(N)ELAC - Covered in our NELAC scope of accreditation

z -- Not covered by our NELAC scope of accreditation

These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of SPL Kilgore. Unless otherwise specified, these test results meet the requirements of NELAC.

RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.



Bill Peery, MS, VP Technical Services





TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary as required by [Title 30, Texas Administrative Code \(30 TAC\), Chapter 39, Subchapter H](#). Applicants may modify the template as necessary to accurately describe their facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how the applicant will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements.

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ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS **INDUSTRIAL WASTEWATER/STORMWATER**

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Space Exploration Technologies Corp. (CN602867657) operates Starbase Launch Pad Site (RN111606745), a water deflector system. The facility is located at the south side of the eastern terminus of State Highway 4, in Brownsville, Cameron County, Texas 78521. The purpose of this application is to obtain a discharge permit for non-process deluge system water that is utilized during launch operations.

Discharges from the facility are expected to contain total dissolved solids, nitrate-nitrogen, phosphorus, total dissolved solids, sulfate, chloride, fluoride, aluminum, cadmium, chromium, copper, cyanide, and zinc. Wastewater will be treated by reusing deluge and pretreatment required.

PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP

AGUAS RESIDUALES INDUSTRIALES /AGUAS PLUVIALES

El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación ejecutiva fedérale de la solicitud de permiso.

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Se espera que las descargas de la instalación contengan solidos disueltos totales, nitrogeno-nitrato, fosforo, sulfato, cloruro, fluoruro, aluminio, cadmio, cromo, cobre, zinc y cianuro . Aguas residuals industriales. está tratado por mediante reutilizacion de agua de diluvio y pretratamiento degun sea necesario.

Provide the name, address, phone and fax number of an individual that can be contacted to answer specific questions about the property.

Prefix (Mr., Ms., Miss): Mrs.

First and Last Name: Katy Groom

Credential (P.E, P.G., Ph.D., etc.):

Title: Manager, Environmental Regulatory Affairs

Mailing Address: L6-1581 Roberts Rd

City, State, Zip Code: Kennedy Space Center, FL 32815

Phone No.: 321-730-1469 Ext.: Fax No.:

E-mail Address: Katy.Groom@spacex.com

2. List the county in which the facility is located: Cameron
3. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

4. Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify the classified segment number.

The discharge route is to mudflats immediately outside fo the containment area and approximatley southwest of the launch pad, south to the final segment, 2301, of the Rio Grande River.

5. Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report).

Provide original photographs of any structures 50 years or older on the property.

Does your project involve any of the following? Check all that apply.

- ☐ Proposed access roads, utility lines, construction easements
- ☐ Visual effects that could damage or detract from a historic property's integrity
- ☐ Vibration effects during construction or as a result of project design
- ☐ Additional phases of development that are planned for the future

☐ Sealing caves, fractures, sinkholes, other karst features

☐ Disturbance of vegetation or wetlands

1. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):

N/A

2. Describe existing disturbances, vegetation, and land use:

No current land use

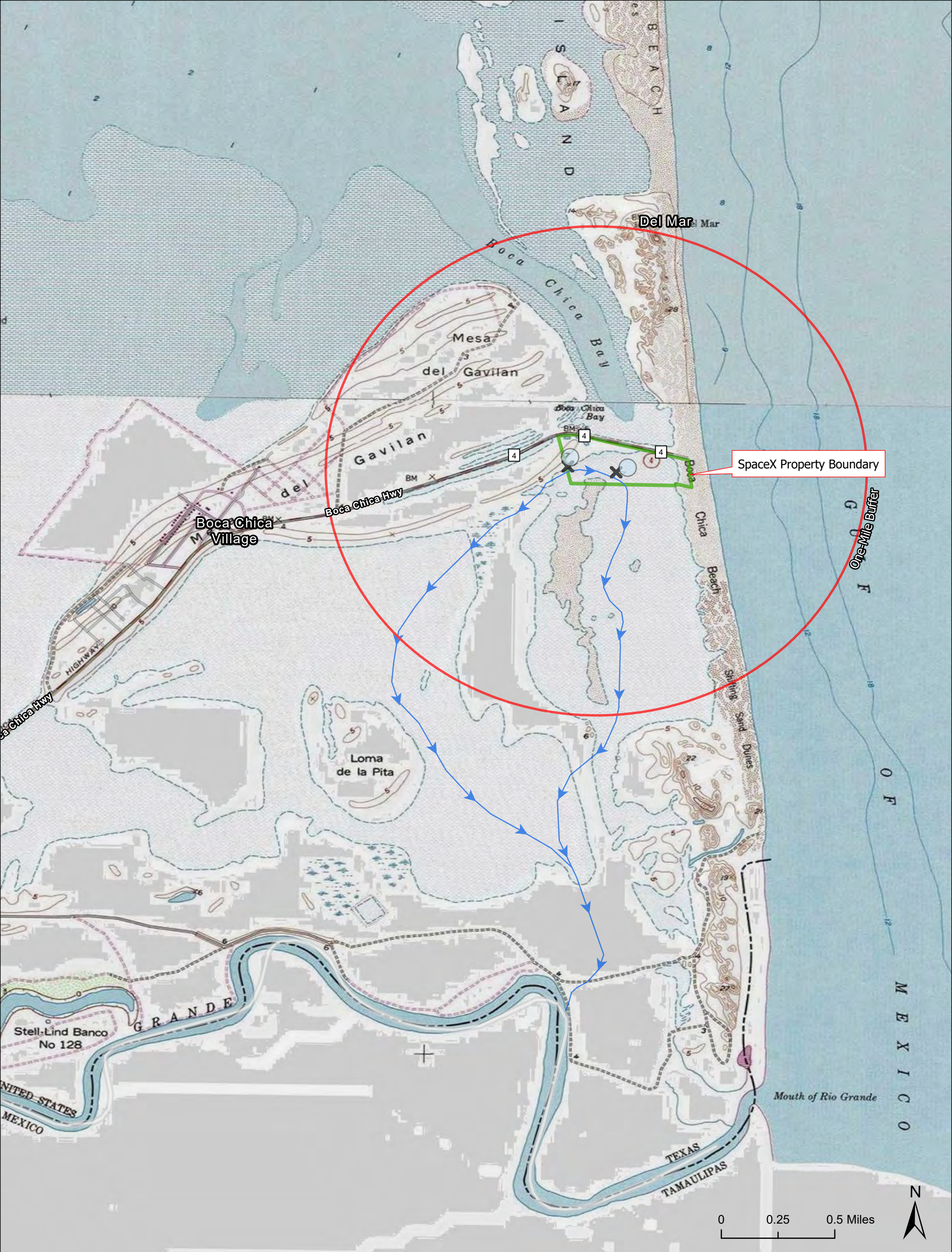
THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

3. List construction dates of all buildings and structures on the property:

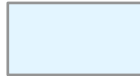
N/A

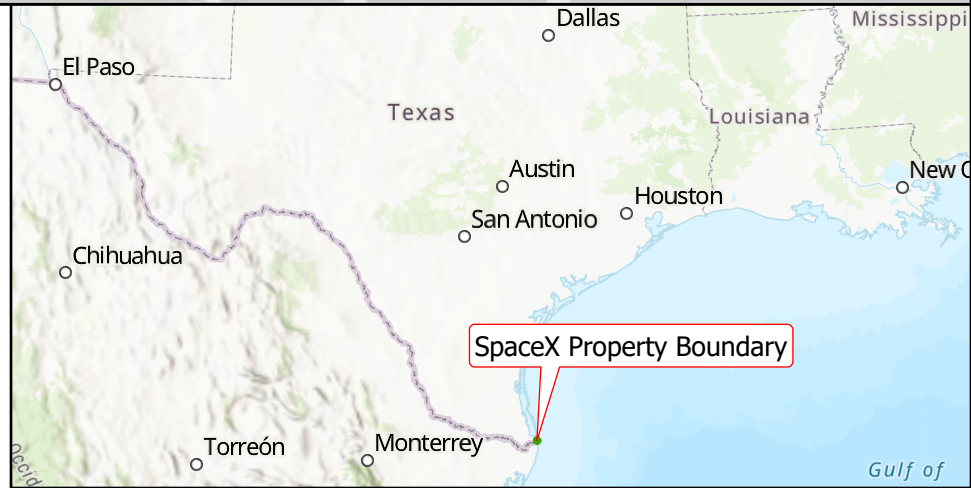
4. Provide a brief history of the property, and name of the architect/builder, if known.

SpaceX launch facilities



SPACEX Launch Pad TPDES Permit
USGS Topographic Map

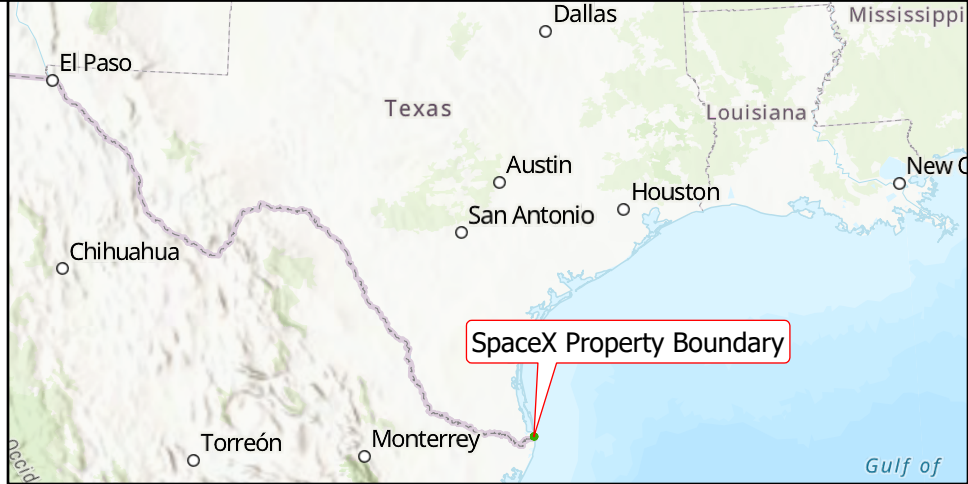
 SpaceX Property Boundary	 Outfall & Sampling
 One-Mile Buffer	 Downstream Flow
 Approximate Water Dispersal Limit	





SPACEX Launch Pad TPDES Permit
Landowner Map

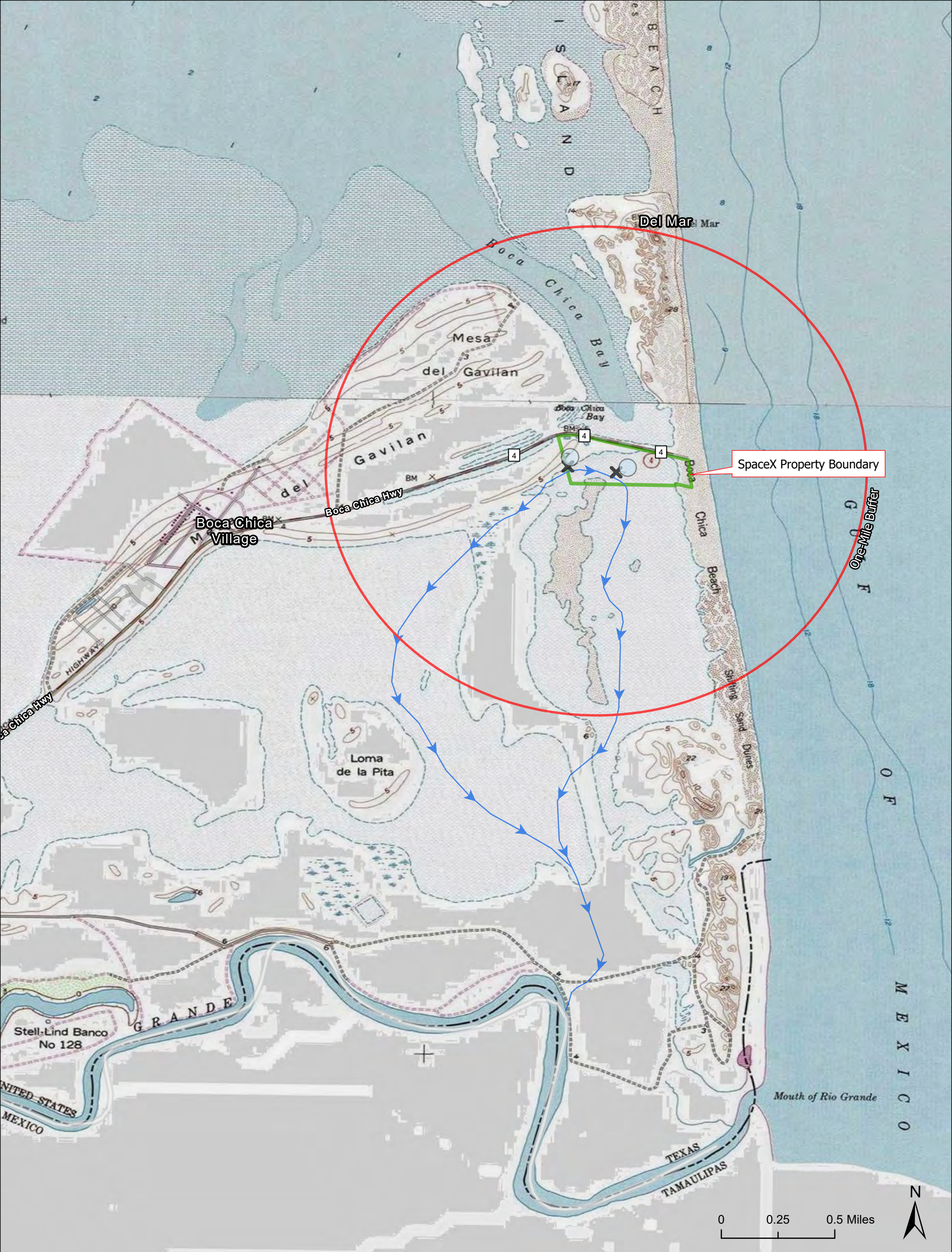
SpaceX Property Boundary	Federal
One-Mile Buffer	SpaceX
Approximate Water Dispersal Limit	TPWD
Outfall & Sampling Point	Private
Downstream Flow Line	
- 0 0.5 1 Miles



Affected Property Owner List		
Property Number	Name	Address
1	TEXAS PARKS & WILDLIFE DEPARTMENT	5460 PARADES LINE RD NO 201, BROWNSVILLE, TX 78526
2	UNITED STATES FISH & WILDLIFE DEPARTMENT	3325 GREEN JAY RD, ALAMO, TX 78516
3	Real Alchemy ILP	3608 E 29th St., STE 100, Bryan TX 77802
4	Gloria F Regis, TR of the Gloria F Regis Rev Trust	7181 Galbraith Line Rd., Lexington, MI 48450
5	Richard Joseph Miriani Trustee/RJ Miriani Revocable Trust	PO BOX 389, Rose City, MI 48654
6	Randolph P and Gary P Gurski	2368 W Farrand Rd, Clio, MI 48420
7	David Suissa Trustee	98 San Jacinto Blvd. Unit FSR2804, Austin, TX 78701
8	Marlene Magda & James J Magda	26446 Woodworth Cir, Dearborn Heights, MI 48127

TEXAS PARKS & WILDLIFE
DEPARTMENT
5460 PARADES LINE RD STE 201
BROWNSVILLE, TX 78526

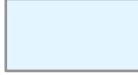
UNITED STATES FISH & WILDLIFE
DEPARTMENTS
3325 GREEN JAY RD.
ALAMO, TX 78516

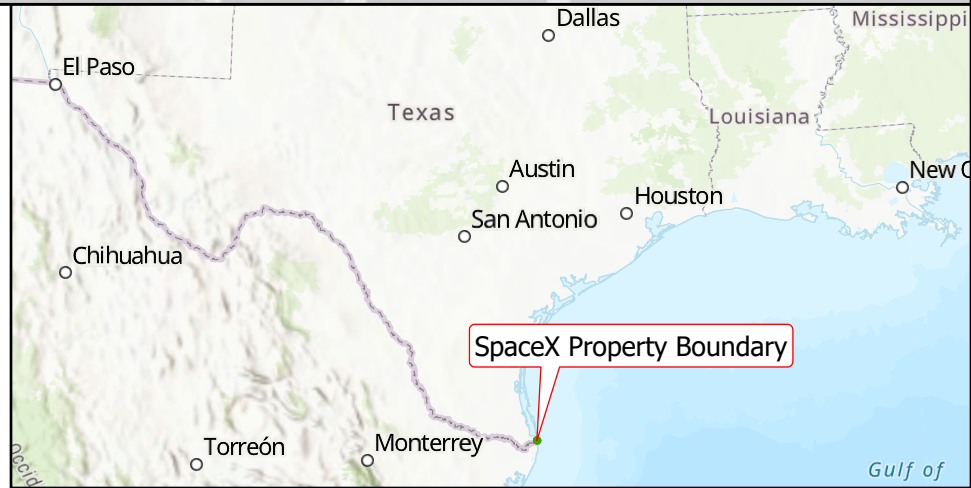


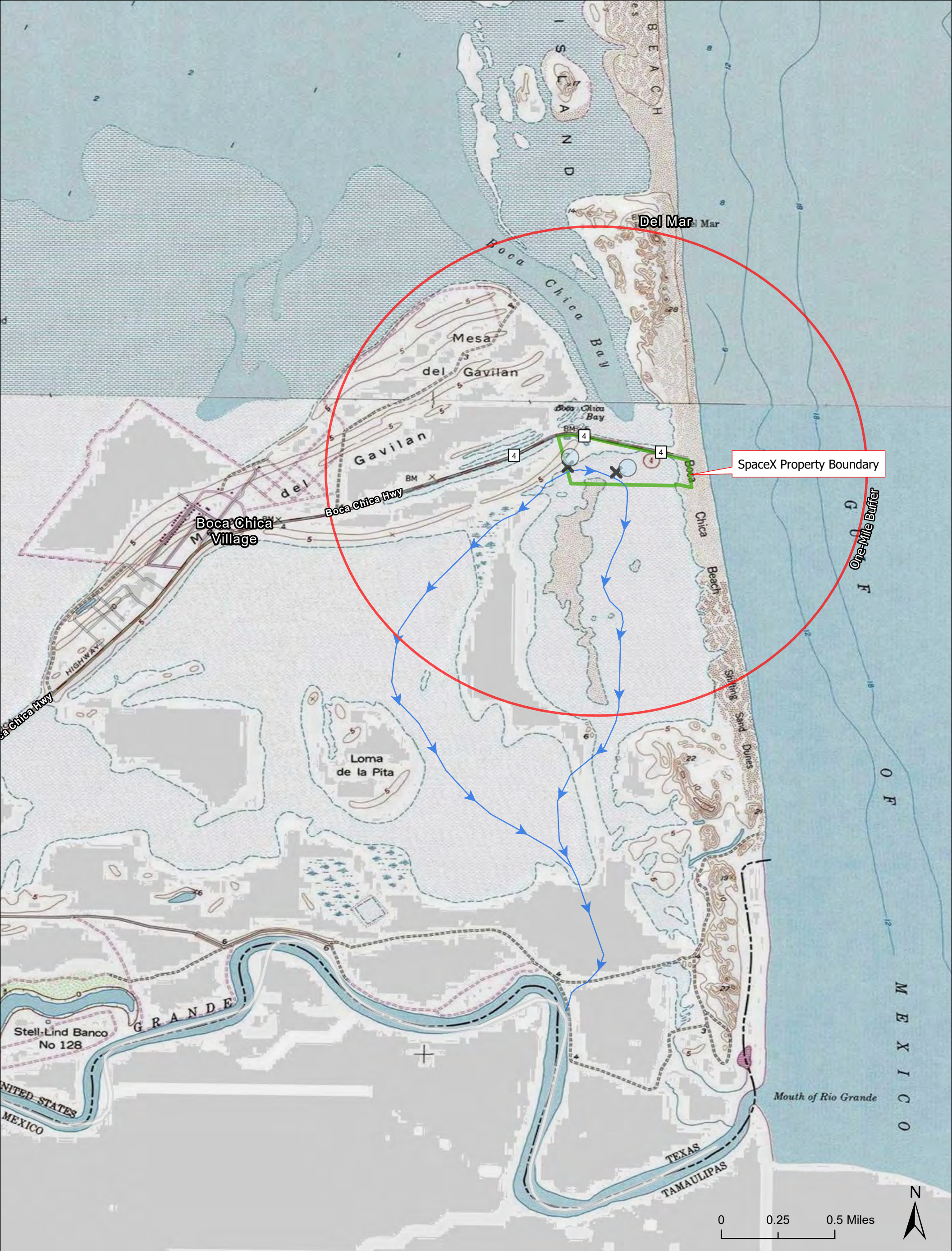
SPACEX

Launch Pad TPDES Permit

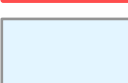
USGS Topographic Map

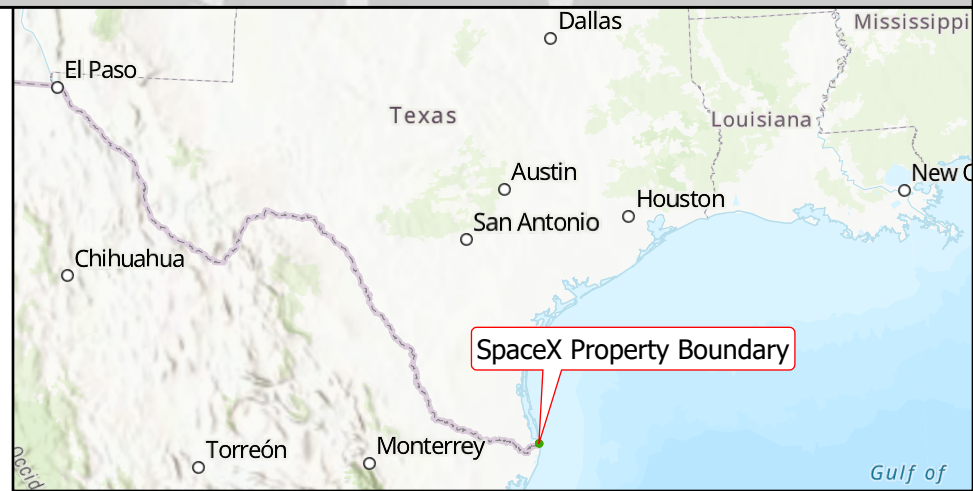
 SpaceX Property Boundary	 Outfall & Sampling
 One-Mile Buffer	 Downstream Flow
 Approximate Water Dispersal Limit	





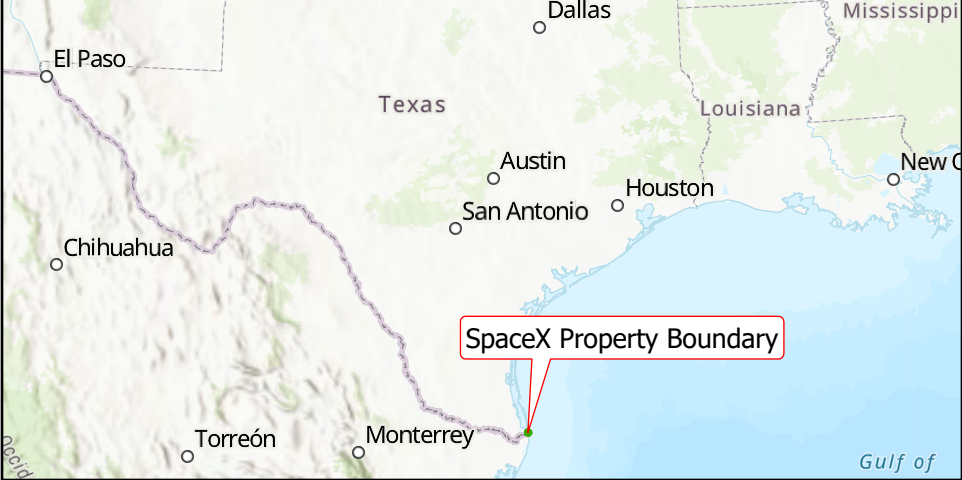
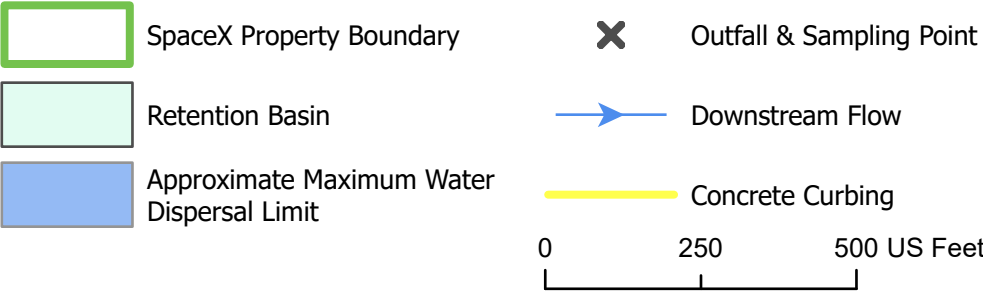
SPACEX Launch Pad TPDES Permit
USGS Topographic Map

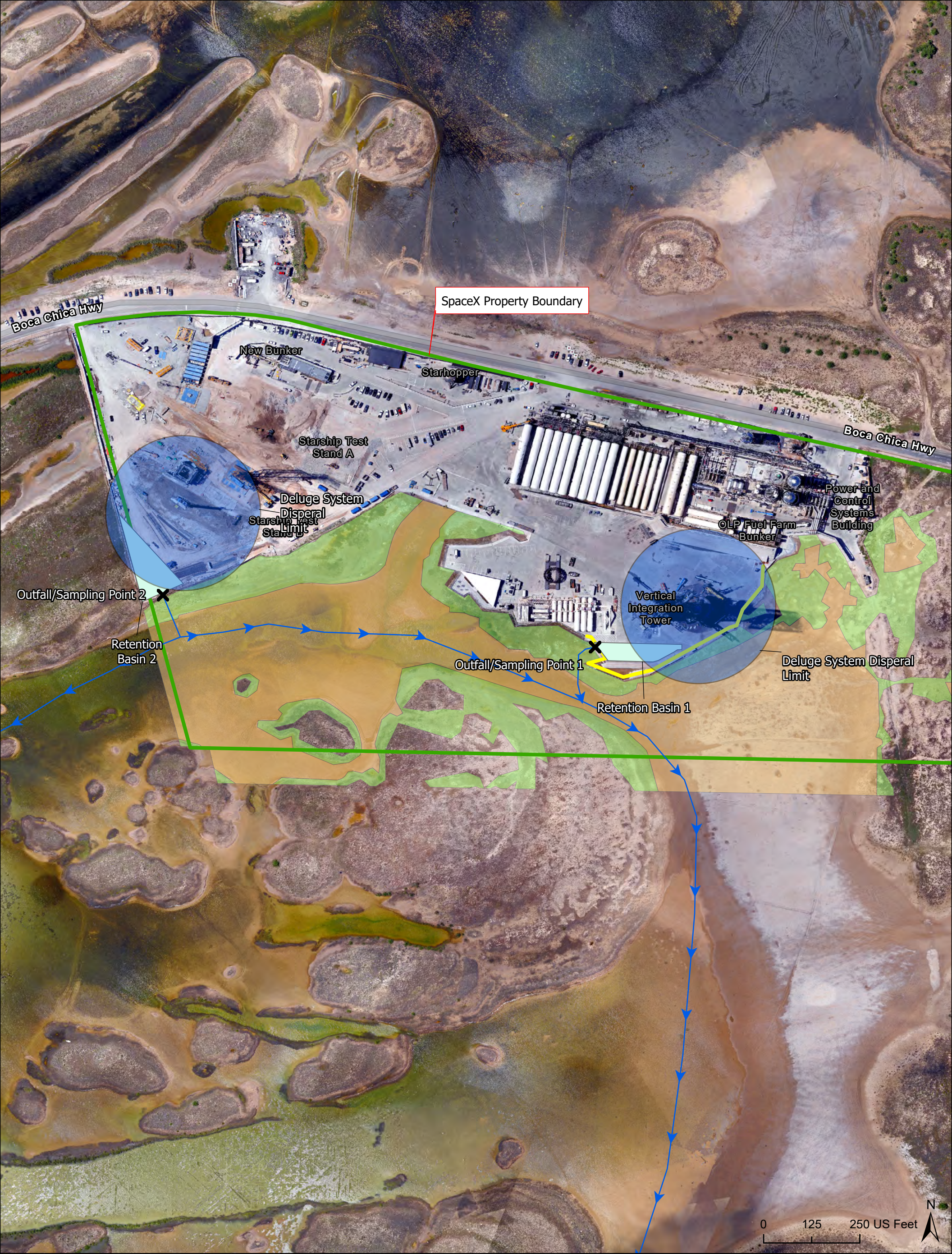
 SpaceX Property Boundary	 Outfall & Sampling
 One-Mile Buffer	 Downstream Flow
 Approximate Water Dispersal Limit	



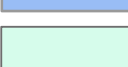
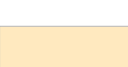
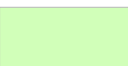


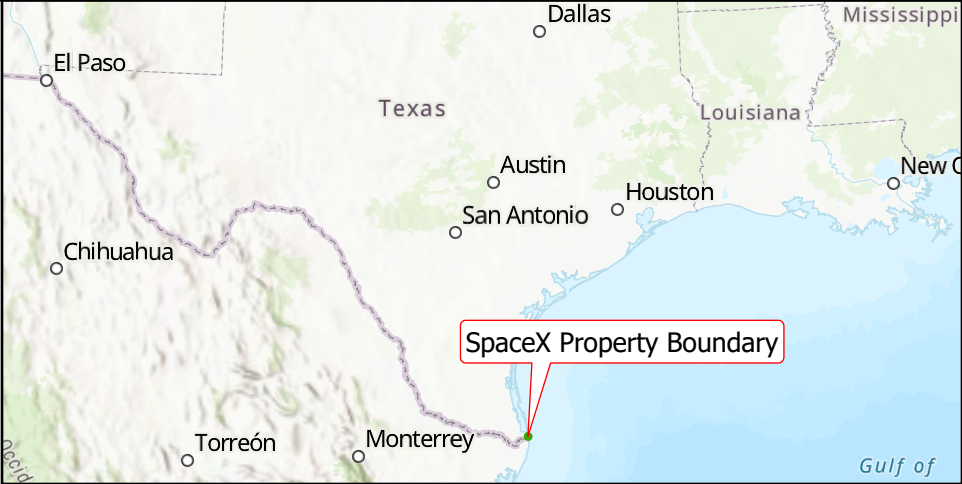
SPACEX Launch Pad TPDES Permit
Facility Map





SPACEX Launch Pad TPDES Permit
Site Map

	SpaceX Property Boundary		Downstream Flow
	Approximate Maximum Water Dispersal Limit		Concrete Curbing
	Retention Basin		Unvegetated Mud Flats
	Outfall & Sampling Point		High Marsh



From: steers@tceq.texas.gov
To: [Carolyn Wood](#)
Subject: TCEQ ePay Receipt for 582EA000615822
Date: Thursday, June 27, 2024 5:12:23 PM

This is an automated message from the TCEQ ePay system. Please do not reply.

Trace Number: 582EA000615822

Date: 06/27/2024 05:11 PM

Payment Method: CC - Authorization 0000S94613

TCEQ Amount: \$350.00

Texas.gov Price: \$358.13*

* This service is provided by Texas.gov, the official website of Texas. The price of this service includes funds that support the ongoing operations and enhancements of Texas.gov, which is provided by a third party in partnership with the State.

Actor: CAROLYN WOOD

Email: carolyn.wood@spacex.com

Payment Contact: SHIRLEY YANG

Phone: 310-363-6000

Company: SPACEX

Address: 1 ROCKET ROAD, HAWTHORNE, CA 90250

Fees Paid:

Fee Description AR Number Amount

WW PERMIT - MINOR FACILITY NOT SUBJECT TO 40 CFR 400-471 - NEW \$300.00

30 TAC 305.53B WQ NOTIFICATION FEE \$50.00

TCEQ Amount: \$350.00

=====

Voucher: 711240

Trace Number: 582EA000615822

Date: 06/27/2024 05:11 PM

Payment Method: CC - Authorization 0000S94613

Voucher Amount: \$300.00

Fee Paid: WW PERMIT - MINOR FACILITY NOT SUBJECT TO 40 CFR 400-471 - NEW

Site Name: STARBASE LAUNCH PAD

Site Location: SH4 BOCA CHICA TEXAS 78521

CN Number: CN602867657

Customer Name: SPACE EXPLORATION TECHNOLOGIES CORP

State Franchise Tax ID: 10106276719

Customer Address: 1 ROCKET RD, HAWTHORNE, CA 90250 6844

Comments: Industrial Wastewater Permit Application Fee

Voucher: 711241

Trace Number: 582EA000615822

Date: 06/27/2024 05:11 PM

Payment Method: CC - Authorization 0000S94613

Voucher Amount: \$50.00

Fee Paid: 30 TAC 305.53B WQ NOTIFICATION FEE

=====

To print out a copy of the receipt and vouchers for this transaction
either click on or copy and paste the following url into your browser:
https://www3.tceq.texas.gov/epay/index.cfm?fuseaction=cor.search&trace_num_txt=582EA000615822.

This e-mail transmission and any attachments are believed to have been sent free of any virus or other defect that might affect

any computer system into which it is received and opened. It is, however, the recipient's responsibility to ensure that the e-mail transmission and any attachments are virus free, and the sender accepts no responsibility for any damage that may in any way arise from their use.



Your transaction is complete. Thank you for using TCEQ ePay.

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt and the vouchers for your records. An email receipt has also been sent.

Transaction Information

Trace Number: 582EA000615822
Date: 06/27/2024 05:11 PM
Payment Method: CC - Authorization 0000S94613
ePay Actor: CAROLYN WOOD
Actor Email: carolyn.wood@spacex.com
IP: 192.31.242.194
TCEQ Amount: \$350.00
Texas.gov Price: \$358.13*

* This service is provided by Texas.gov, the official website of Texas. The price of this service includes funds that support the ongoing operations and enhancements of Texas.gov, which is provided by a third party in partnership with the State.

Payment Contact Information

Name: SHIRLEY YANG
Company: SPACEX
Address: 1 ROCKET ROAD, HAWTHORNE, CA 90250
Phone: 310-363-6000

Cart Items

Click on the voucher number to see the voucher details.

Voucher	Fee Description	AR Number	Amount
711240	WW PERMIT - MINOR FACILITY NOT SUBJECT TO 40 CFR 400-471 - NEW		\$300.00
711241	30 TAC 305.53B WQ NOTIFICATION FEE		\$50.00
TCEQ Amount:			\$350.00

[ePay Again](#)

[Exit ePay](#)

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt for your records.

Attachment A



TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
☒ New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
☐ Renewal (Core Data Form should be submitted with the renewal form)	☐ Other	
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 6028676S7		RN 111606745

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)	
☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership			
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)			
The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).			
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)		If new Customer, enter previous Customer below:	
Space Exploration Technologies Corp.			
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
805421124	1-01-062767	01-0627671	120-406-462
11. Type of Customer:	☒ Corporation	☐ Individual	Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other	☐ Sole Proprietorship	☐ Other:	
12. Number of Employees		13. Independently Owned and Operated?	
☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☒ 501 and higher		☒ Yes ☐ No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following			
☐ Owner ☐ Operator ☒ Owner & Operator ☐ Other:			
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant			
15. Mailing Address:	1 Rocket Road		
City	Hawthorne	State	CA
ZIP	90250	ZIP + 4	6844
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)	
18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)	

SECTION III: Regulated Entity Information**21. General Regulated Entity Information** (If "New Regulated Entity" is selected, a new permit application is also required.)
☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)

Starbase Launch Pad Site

23. Street Address of the Regulated Entity:

(No PO Boxes)

1 Rocket Road

City

Brownsville

State

TX

ZIP

78521

ZIP + 4

0008

24. County

Cameron

If no Street Address is provided, fields 25-28 are required.

25. Description to

Physical Location:

26. Nearest City

State

Nearest ZIP Code

Brownsville

TX

78521

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:

25.996969

28. Longitude (W) In Decimal:

-97.156269

Degrees

Minutes

Seconds

Degrees

Minutes

Seconds

29. Primary SIC Code**30. Secondary SIC Code****31. Primary NAICS Code****32. Secondary NAICS Code**

(4 digits)

(4 digits)

(5 or 6 digits)

(5 or 6 digits)

3761

33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)

Launch site

34. Mailing

Address:

1 Rocket Road

City

Brownsville

State

TX

ZIP

78521

ZIP + 4

8

35. E-Mail Address:**36. Telephone Number****37. Extension or Code****38. Fax Number** (if applicable)

(323) 537-71

() -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

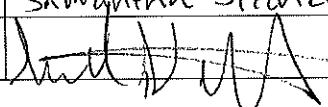
☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☒ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☒ Sludge	☒ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Carolyn A. Wood		41. Title:	Sr. Enviro Regulatory Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(323) 537-0071		() -	carolyn.wood@spacex.com	

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Space exploration technologies	Job Title:	EHS Manager
Name (In Print):	Samantha Stecher-Stroud	Phone:	(210) 913-0901
Signature:		Date:	6.7.2024

Attachment B



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP

AGUAS RESIDUALES INDUSTRIALES /AGUAS PLUVIALES

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Se espera que las descargas de la instalación contengan solidos disueltos totales, nitrogeno-nitrato, fosforo, sulfato, cloruro, fluoruro, aluminio, cadmio, cromo, cobre, zinc y cianuro . Aguas residuals industriales. está tratado por mediante reutilizacion de agua de diluvio y pretratamiento degun sea necesario.

Total

INSTRUCTIONS

1. Enter the name of applicant in this section. The applicant name should match the name associated with the customer number.
2. Enter the Customer Number in this section. Each Individual or Organization is issued a unique 11-digit identification number called a CN (e.g. CN123456789).
3. Choose “operates” in this section for existing facility applications or choose “proposes to operate” for new facility applications.
4. Enter the name of the facility in this section. The facility name should match the name associated with the regulated entity number.
5. Enter the Regulated Entity number in this section. Each site location is issued a unique 11-digit identification number called an RN (e.g. RN123456789).
6. Choose the appropriate article (a or an) to complete the sentence.
7. Enter a description of the facility in this section. For example: steam electric generating facility, nitrogenous fertilizer manufacturing facility, etc.
8. Choose “is” for an existing facility or “will be” for a new facility.
9. Enter the location of the facility in this section.
10. Enter the City nearest the facility in this section.
11. Enter the County nearest the facility in this section.
12. Enter the zip code for the facility address in this section.
13. Enter a summary of the application request in this section. For example: renewal to discharge 25,000 gallons per day of treated domestic wastewater, new application to discharge process wastewater and stormwater on an intermittent and flow-variable basis, or major amendment to reduce monitoring frequency for pH, etc. If more than one outfall is included in the application, provide applicable information for each individual outfall.
14. List all pollutants expected in the discharge from this facility in this section. If applicable, refer to the pollutants from any federal numeric effluent limitations that apply to your facility.
15. Enter the discharge types from your facility in this section (e.g., stormwater, process wastewater, once through cooling water, etc.)
16. Choose the appropriate verb tense to complete the sentence.
17. Enter a description of the wastewater treatment used at your facility. Include a description of each process, starting with initial treatment and finishing with the outfall/point of disposal. Use additional lines for individual discharge types if necessary.

Questions or comments concerning this form may be directed to the Water Quality Division's Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

Example

Individual Industrial Wastewater Application

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

ABC Corporation (CN600000000) operates the Starr Power Station (RN10000000000), a two-unit gas-fired electric generating facility. Unit 1 has a generating capacity of 393 megawatts (MWs) and Unit 2 has a generating capacity of 528 MWs. The facility is located at 1356 Starr Street, near the City of Austin, Travis County, Texas 78753.

This application is for a renewal to discharge 870,000,000 gallons per day of once through cooling water, auxiliary cooling water, and also authorizes the following waste streams monitored inside the facility (internal outfalls) before it is mixed with the other wastewaters authorized for discharge via main Outfall 001, referred to as “previously monitored effluents” (low-volume wastewater, metal-cleaning waste, and stormwater (from diked oil storage area yards and storm drains)) via Outfall 001. Low-volume waste sources, metal-cleaning waste, and stormwater drains on a continuous and flow-variable basis via internal Outfall 101.

The discharge of once through cooling water via Outfall 001 and low-volume waste and metal-cleaning waste via Outfall 101 from this facility is subject to federal effluent limitation guidelines at 40 CFR Part 423. The pollutants expected from these discharges based on 40 CFR Part 423 are: free available chlorine, total residual chlorine, total suspended solids, oil and grease, total iron, total copper, and pH. Temperature is also expected from these discharges. Additional potential pollutants are included in the Industrial Wastewater Application Technical Report, Worksheet 2.0.

Cooling water and boiler make-up water are supplied by Lake Starr Reservoir. The City of Austin municipal water plant (CN600000000, PWS 00000) supplies the facility’s potable water and serves as an alternate source of boiler make-up water. Water from the Lake Starr Reservoir is withdrawn at the intake structure and treated with sodium hypochlorite to prevent biofouling and sodium bromide as a chlorine enhancer to improve efficacy and then passed through condensers and auxiliary equipment on a once-through basis to cool equipment and condense exhaust steam.

Low-volume wastewater from blowdown of boiler Units 1 and 2 and metal-cleaning wastes receive no treatment prior to discharge via Outfall 101. Plant floor and equipment drains and stormwater runoff from diked oil storage areas, yards, and storm drains are routed through an oil and water separator prior to discharge via Outfall 101. Domestic wastewater, blowdown, and backwash water from the service water filter, clarifier, and sand filter are routed to the Starr Creek Domestic Sewage Treatment Plant, TPDES Permit No. WQ0010000001, for treatment and disposal. Metal-cleaning waste from equipment cleaning is generally disposed of off-site.

Attachment C



Texas Commission on Environmental Quality

Public Involvement Plan Form for Permit and Registration Applications

The Public Involvement Plan is intended to provide applicants and the agency with information about how public outreach will be accomplished for certain types of applications in certain geographical areas of the state. It is intended to apply to new activities; major changes at existing plants, facilities, and processes; and to activities which are likely to have significant interest from the public. This preliminary screening is designed to identify applications that will benefit from an initial assessment of the need for enhanced public outreach.

All applicable sections of this form should be completed and submitted with the permit or registration application. For instructions on how to complete this form, see TCEQ-20960-inst.

Section 1. Preliminary Screening

- ☒ New Permit or Registration Application
☐ New Activity - modification, registration, amendment, facility, etc. (see instructions)

If neither of the above boxes are checked, completion of the form is not required and does not need to be submitted.

Section 2. Secondary Screening

- ☒ Requires public notice,
☒ Considered to have significant public interest, **and**
☒ Located within any of the following geographical locations:

- Austin
- Dallas
- Fort Worth
- Houston
- San Antonio
- West Texas
- Texas Panhandle
- Along the Texas/Mexico Border
- Other geographical locations should be decided on a case-by-case basis

**If all the above boxes are not checked, a Public Involvement Plan is not necessary.
Stop after Section 2 and submit the form.**

- ☐ Public Involvement Plan not applicable to this application. Provide **brief** explanation.

Section 3. Application Information

Type of Application (check all that apply):

Air ☐ Initial ☐ Federal ☐ Amendment ☐ Standard Permit ☐ Title V
Waste ☐ Municipal Solid Waste ☐ Industrial and Hazardous Waste ☐ Scrap Tire
☐ Radioactive Material Licensing ☐ Underground Injection Control

Water Quality

- ☒ Texas Pollutant Discharge Elimination System (TPDES)
☐ Texas Land Application Permit (TLAP)
☐ State Only Concentrated Animal Feeding Operation (CAFO)
☐ Water Treatment Plant Residuals Disposal Permit
☐ Class B Biosolids Land Application Permit
☐ Domestic Septage Land Application Registration

Water Rights New Permit

- ☐ New Appropriation of Water
☐ New or existing reservoir

Amendment to an Existing Water Right

- ☐ Add a New Appropriation of Water
☐ Add a New or Existing Reservoir
☐ Major Amendment that could affect other water rights or the environment

Section 4. Plain Language Summary

Provide a brief description of planned activities.

Deflector wastewater would be reused in the deluge system. Sedimentation controls would be utilized to be used/proposed to prepare industrial wastewater for re-use.

Section 5. Community and Demographic Information

Community information can be found using EPA's EJ Screen, U.S. Census Bureau information, or generally available demographic tools.

Information gathered in this section can assist with the determination of whether alternative language notice is necessary. Please provide the following information.

Brownsville

(City)

Cameron County

(County)

(Census Tract)

Please indicate which of these three is the level used for gathering the following information.

☐

City

☒

County

☐

Census Tract

(a) Percent of people over 25 years of age who at least graduated from high school

70.9%

(b) Per capita income for population near the specified location

\$21,440

(c) Percent of minority population and percent of population by race within the specified location

White, 96.8%; Black or African American, 1%; American Indian & Alaska Native, 0.7%; Asian, 0.9%; Native Hawaiian & other Pacific Islander, 0.1%; 2 or more Races, 0.6%; Hispanic or Latino, 89.8%; White alone, not Hispanic or Latino, 8.5%

(d) Percent of Linguistically Isolated Households by language within the specified location

Language other than English spoken at home, 71% Spanish

(e) Languages commonly spoken in area by percentage

English and Spanish

(f) Community and/or Stakeholder Groups

(g) Historic public interest or involvement

TPDES Permit application for municipal wastewater, permit No. WQ0016342001 garnered significant public interest. The site itself and historic activities garner significant public interest

Section 6. Planned Public Outreach Activities

(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?

☐ Yes ☐ No

(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?

☐ Yes ☐ No

If Yes, please describe.

N/A

If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.

(c) Will you provide notice of this application in alternative languages?

☐ Yes ☐ No

Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the alternative language.

If yes, how will you provide notice in alternative languages?

- ☒ Publish in alternative language newspaper
- ☒ Posted on Commissioner's Integrated Database Website
- ☐ Mailed by TCEQ's Office of the Chief Clerk
- ☐ Other (specify)

(d) Is there an opportunity for some type of public meeting, including after notice?

☐ Yes ☐ No

(e) If a public meeting is held, will a translator be provided if requested?

☐ Yes ☐ No

(f) Hard copies of the application will be available at the following (check all that apply):

- ☒ TCEQ Regional Office ☒ TCEQ Central Office
- ☒ Public Place (specify) Port Isabel Public Library

Section 7. Voluntary Submittal

For applicants voluntarily providing this Public Involvement Plan, who are not subject to formal public participation requirements.

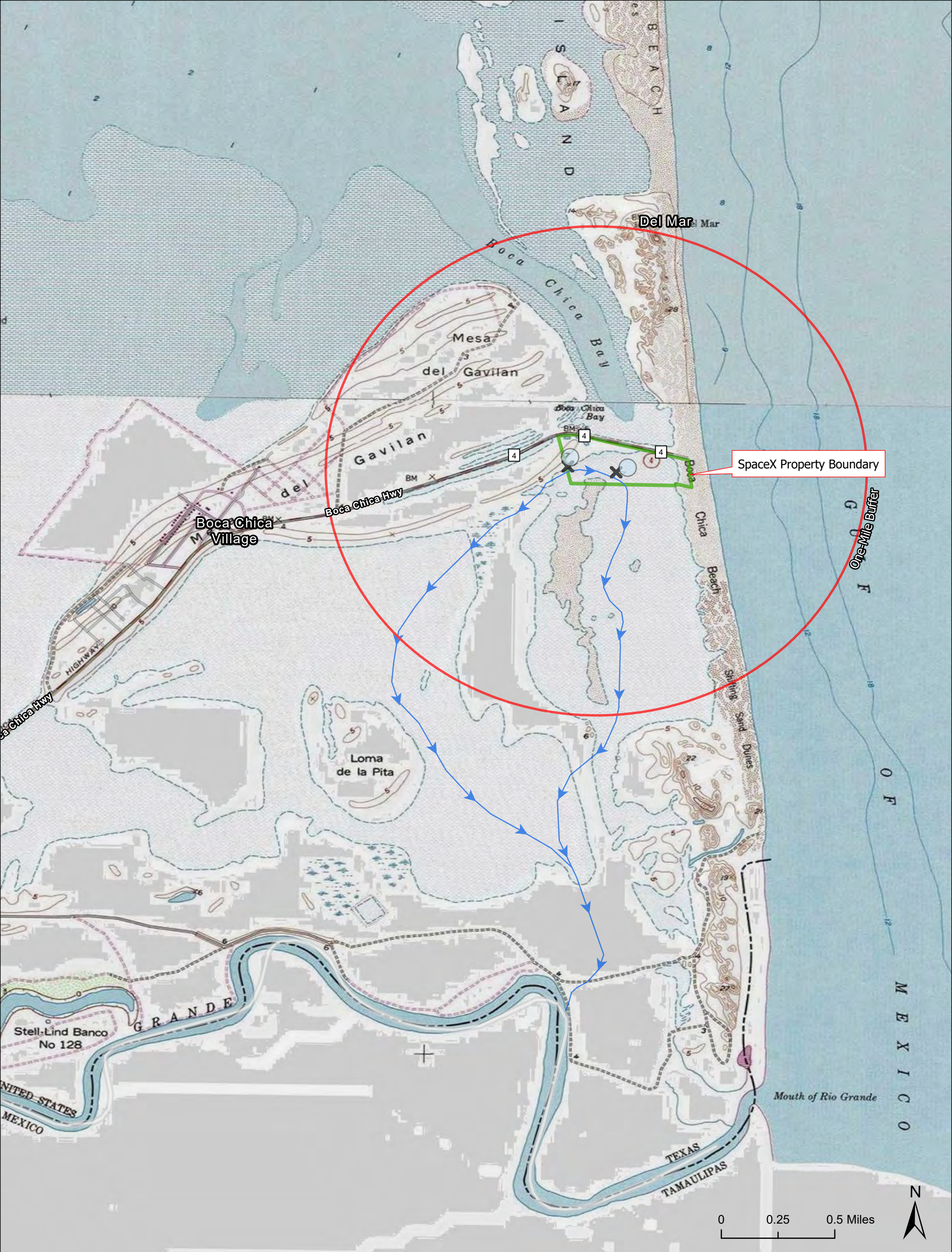
Will you provide notice of this application, including notice in alternative languages?

☐ Yes ☐ No

What types of notice will be provided?

- ☐ Publish in alternative language newspaper
- ☐ Posted on Commissioner's Integrated Database Website
- ☐ Mailed by TCEQ's Office of the Chief Clerk
- ☐ Other (specify)

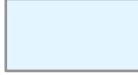
Attachment D

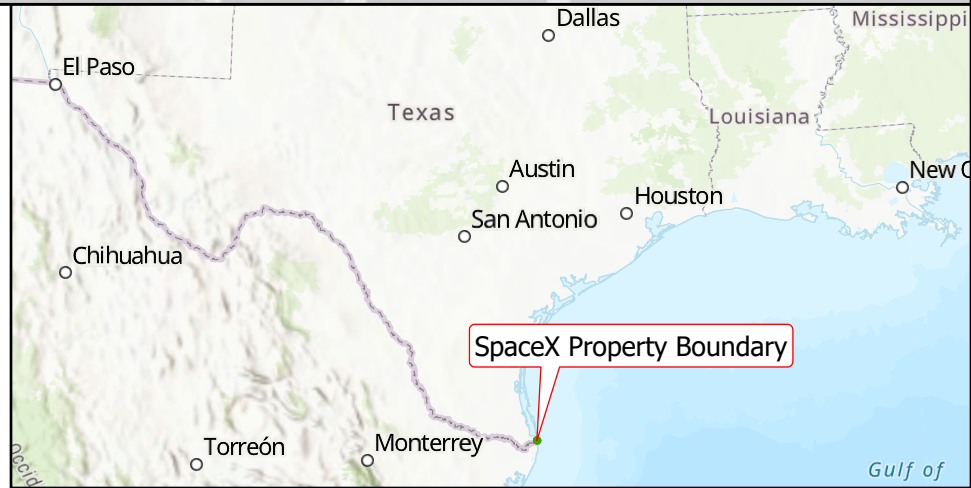


SPACEX

Launch Pad TPDES Permit

USGS Topographic Map

 SpaceX Property Boundary	 Outfall & Sampling
 One-Mile Buffer	 Downstream Flow
 Approximate Water Dispersal Limit	

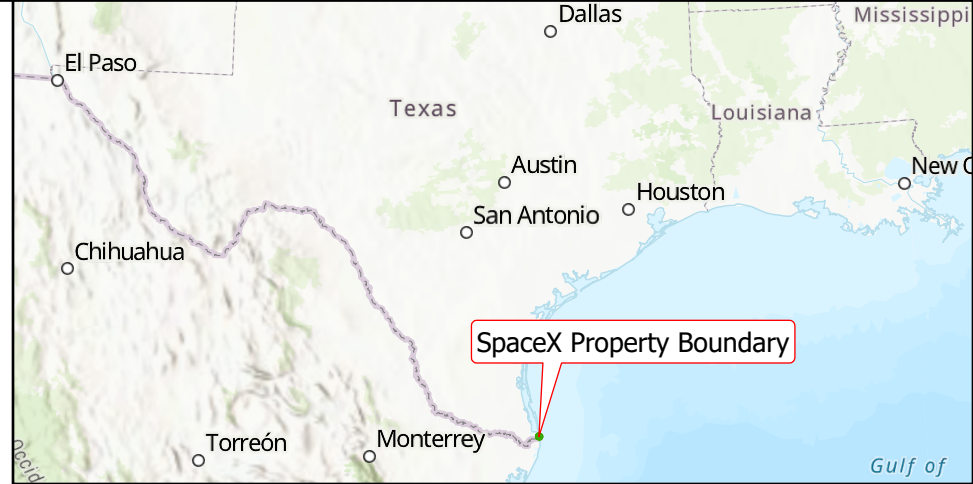


Attachment E



SPACEX Launch Pad TPDES Permit
Landowner Map

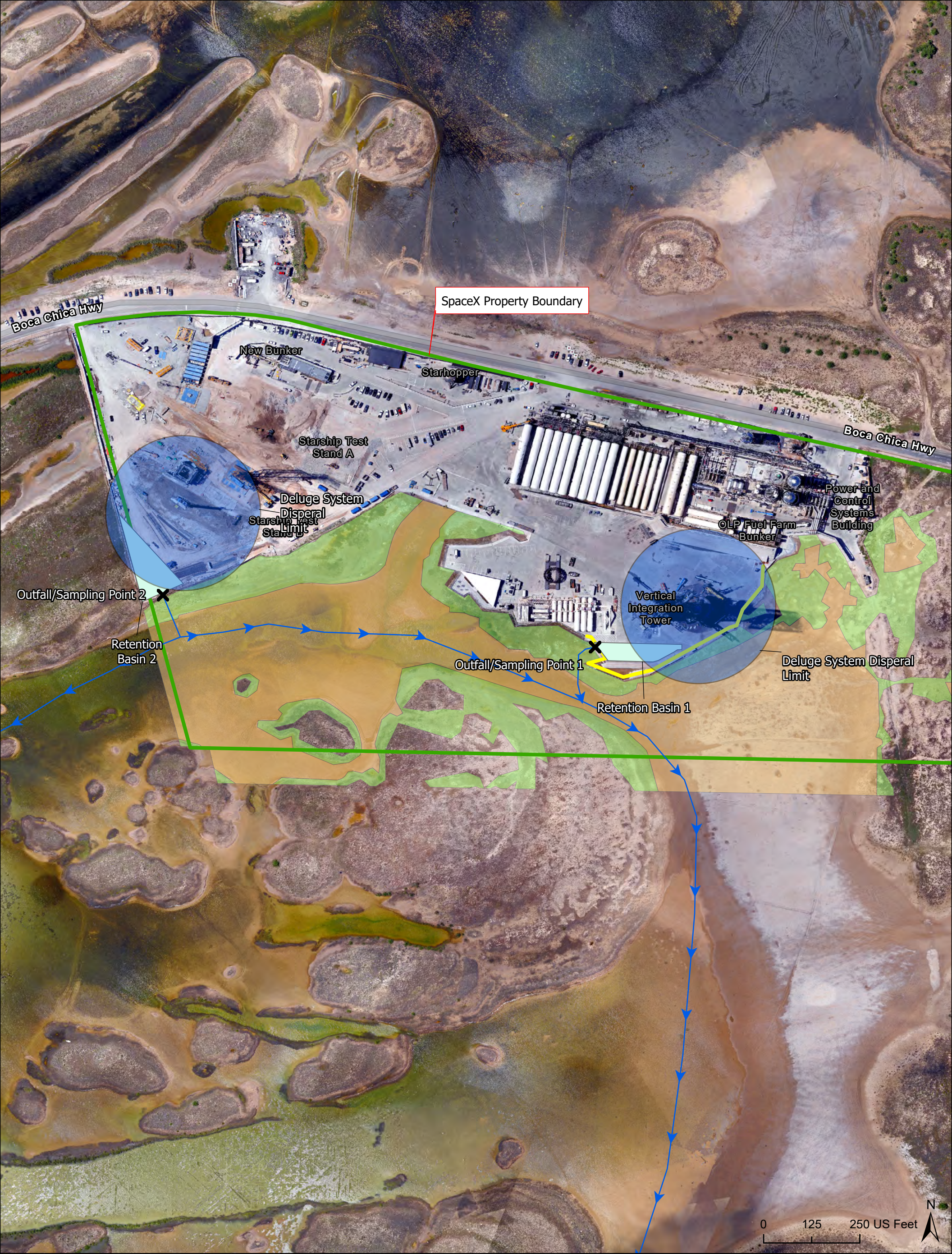
 SpaceX Property Boundary	 Federal
 One-Mile Buffer	 SpaceX
 Approximate Water Dispersal Limit	 TPWD
 Outfall & Sampling Point	 Private
 Downstream Flow Line	0 0.5 1 Miles



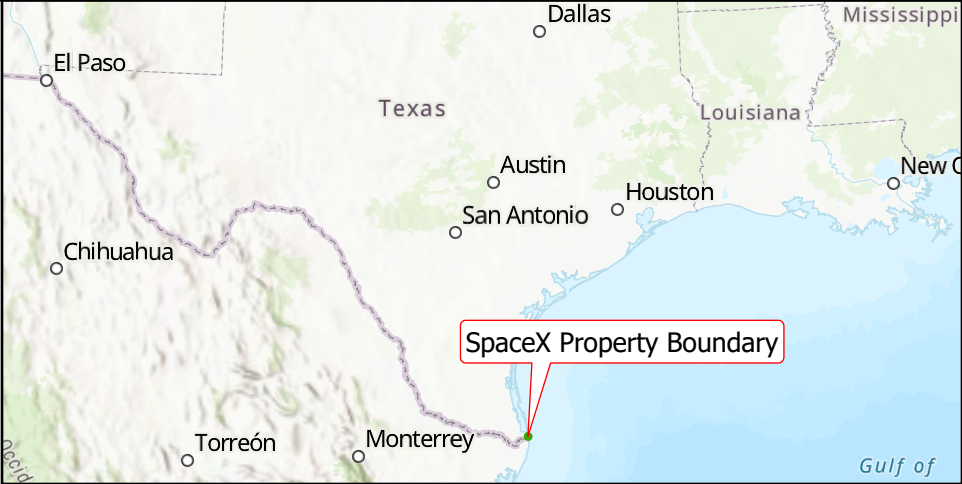
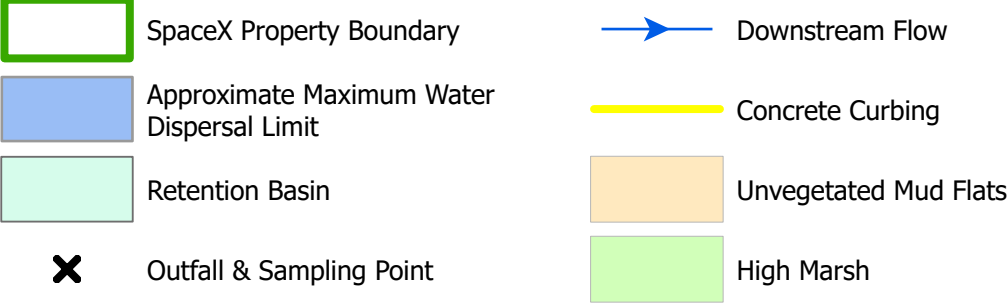
Attachment F

[illegible]

Attachment G



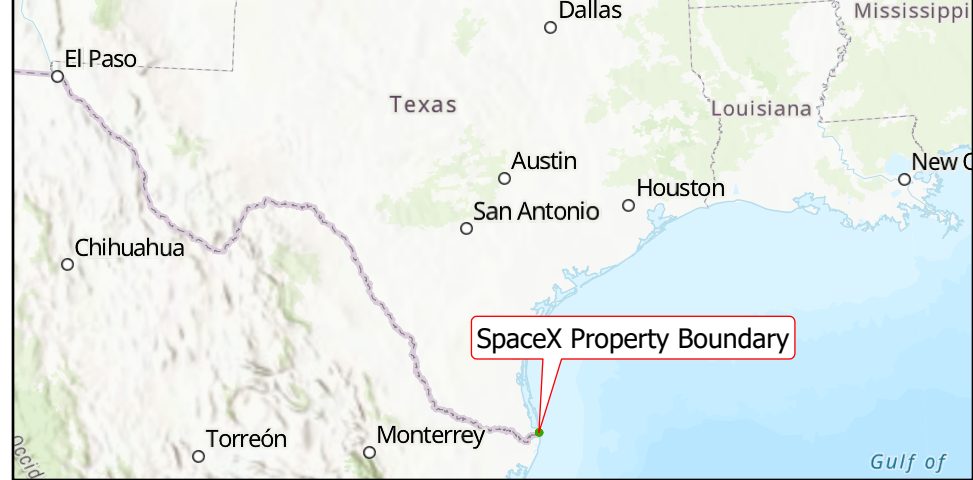
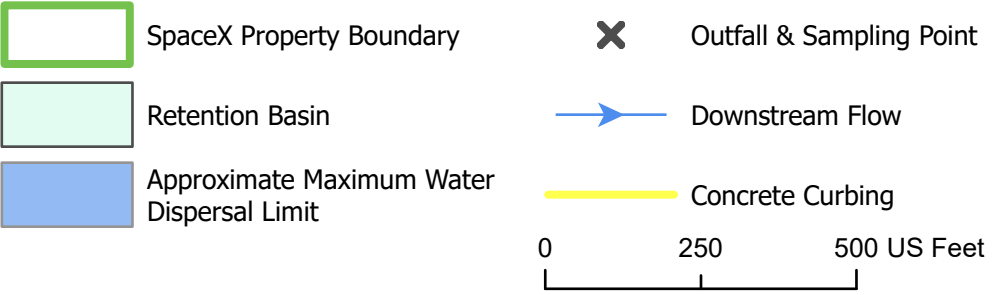
SPACEX Launch Pad TPDES Permit
Site Map



Attachment H



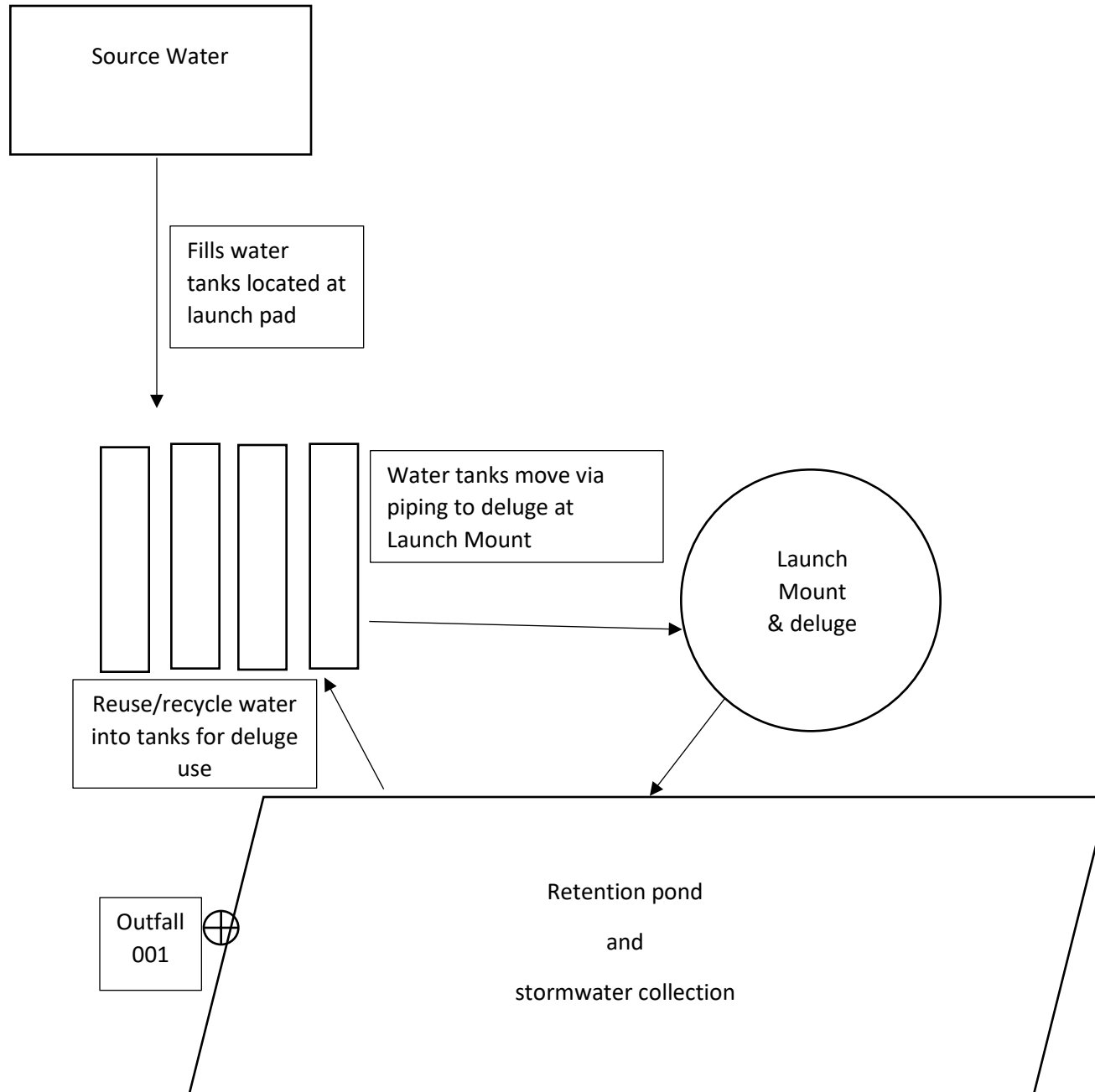
SPACEX Launch Pad TPDES Permit
Facility Map

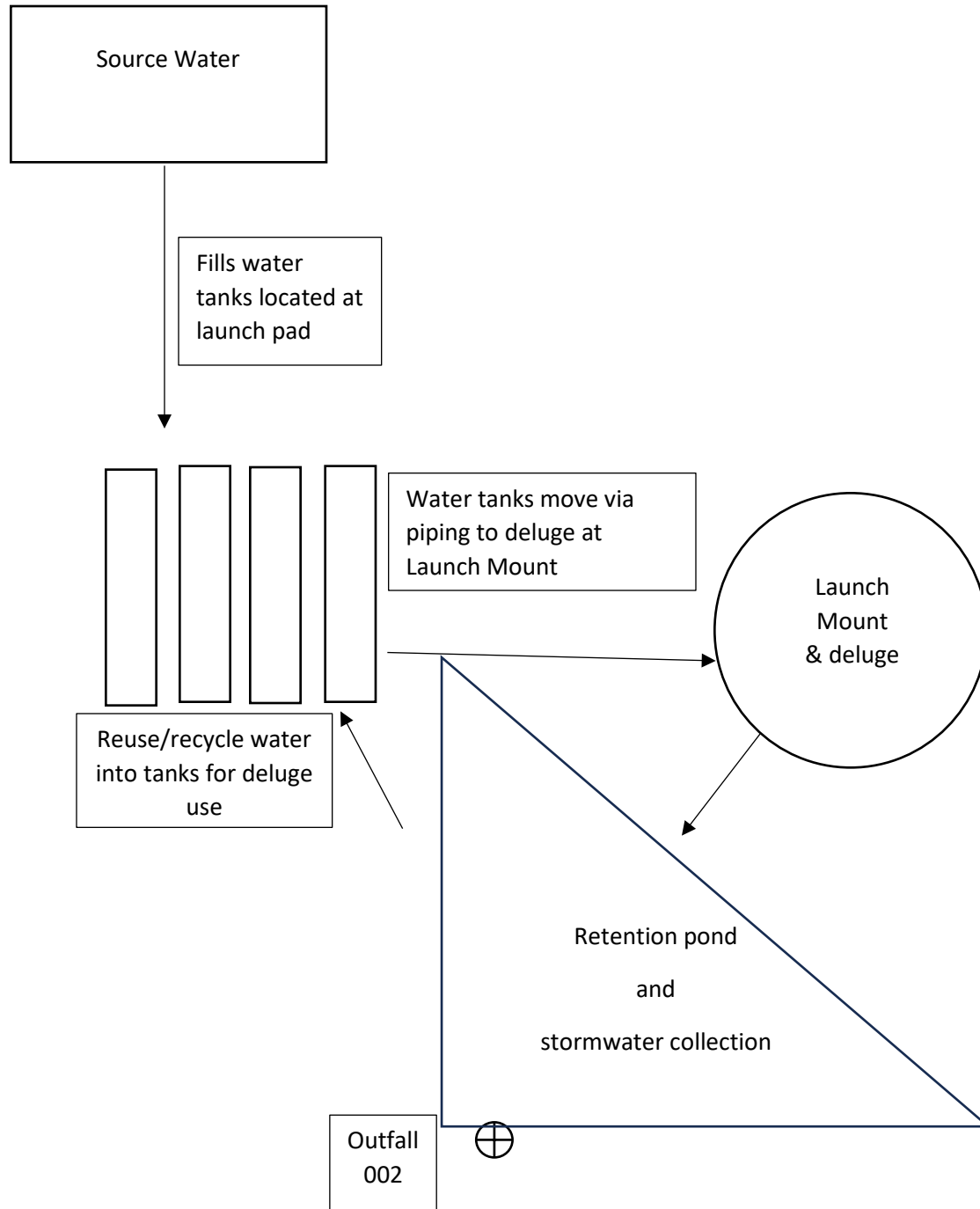


Attachment I



Attachment J





Attachment K

Project
1105141

SPAC-R

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Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

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13:37

TABLE OF CONTENTS

Retention Pond

This report consists of this Table of Contents and the following pages:

<u>Report Name</u>	<u>Description</u>	<u>Pages</u>
1105141_r02_01_ProjectSamples	SPL Kilgore Project P:1105141 C:SPAC Project Sample Cross Reference t:304	17
1105141_r03_03_ProjectResults	SPL Kilgore Project P:1105141 C:SPAC Project Results t:304 PO: 2605353	12
1105141_r10_05_ProjectQC	SPL Kilgore Project P:1105141 C:SPAC Project Quality Control Groups	32
1105141_r99_09_CoC__1_of_1	SPL Kilgore CoC SPAC 1105141_1_of_1	9
Total Pages:		70



SAMPLE CROSS REFERENCE

Project

1105141

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SPACEX
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 Space Exploration Technologies
 1 Rocket Rd
 Brownsville, TX 78521

Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

Bottle 01 Amber 32 Oz
 Bottle 02 Amber 32 Oz
 Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
 Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
 Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
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 Bottle 11 Polyethylene 1/2 gal (White)
 Bottle 12 16 oz HNO3 Metals Plastic
 Bottle 13 8 oz Plastic H2SO4 pH < 2
 Bottle 14 8 oz Plastic H2SO4 pH < 2
 Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
 Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
 Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
 Bottle 18 Plastic 1 liter unpreserved
 Bottle 19 Cr+6 Preserved 250 Polyethylene
 Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
 Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
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 Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

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EPA 300.0 2.1	01	1121871	05/31/2024	1121871	05/31/2024

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Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
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 Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
 Bottle 18 Plastic 1 liter unpreserved
 Bottle 19 Cr+6 Preserved 250 Polyethylene
 Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
 Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
 Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
 Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
 Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
 Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
 Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
 Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
 Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
ASTM D7065-11	36	1122298	06/05/2024	1122871	06/06/2024
EPA 200.8 5.4	30	1121672	05/31/2024	1122038	06/03/2024

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1 Rocket Rd
Brownsville, TX 78521

Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 200.7 4.4	30	1121672	05/31/2024	1123498	06/12/2024
EPA 245.1 3	31	1121865	06/03/2024	1121966	06/03/2024

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 200.8 5.4	30	1121672	05/31/2024	1123699	06/12/2024
EPA 200.8 5.4	30	1121672	05/31/2024	1123260	06/10/2024

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 200.8 5.4	30	1121672	05/31/2024	1122450	06/06/2024
SM 2320 B-2011	18	1122797	06/07/2024	1122797	06/07/2024

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 5210 B-2016	01	1121636	06/05/2024	1121636	06/05/2024
SM 5210 B-2016 (TCMP Inhibitor)	01	1121637	06/05/2024	1121637	06/05/2024

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 4500-CN ⁻ G-2016			06/04/2024		06/04/2024
SM 4500-CN ⁻ G-2016	29	1121666	05/31/2024	1122125	06/04/2024

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

Bottle 01 Amber 32 Oz
 Bottle 02 Amber 32 Oz
 Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
 Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
 Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
 Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
 Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
 Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 11 Polyethylene 1/2 gal (White)
 Bottle 12 16 oz HNO3 Metals Plastic
 Bottle 13 8 oz Plastic H2SO4 pH < 2
 Bottle 14 8 oz Plastic H2SO4 pH < 2
 Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
 Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
 Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
 Bottle 18 Plastic 1 liter unpreserved
 Bottle 19 Cr+6 Preserved 250 Polyethylene
 Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
 Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
 Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
 Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
 Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
 Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
 Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
 Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
 Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 4500-CN ⁻ E-2016	23	1121649	05/31/2024	1122121	06/04/2024
SM 5220 D-2011	13	1121775	05/31/2024	1121775	05/31/2024

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SAMPLE CROSS REFERENCE

Project

1105141

SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
Calculation			06/06/2024		06/06/2024
SM 3500-Cr B-2011	19	1122575	06/05/2024	1122575	06/05/2024

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Brownsville, TX 78521

Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 3500-Cr B-2011		1121254	05/29/2024	1121254	05/29/2024
EPA 1664B (HEM)	08	1122457	06/05/2024	1122457	06/05/2024

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 350.1 2	20	1121581	05/30/2024	1122206	06/04/2024
EPA 351.2 minus EPA 350.1			06/05/2024		06/05/2024

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SPACEX
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 Brownsville, TX 78521

Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

Bottle 01 Amber 32 Oz
 Bottle 02 Amber 32 Oz
 Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
 Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
 Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
 Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
 Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
 Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 11 Polyethylene 1/2 gal (White)
 Bottle 12 16 oz HNO3 Metals Plastic
 Bottle 13 8 oz Plastic H2SO4 pH < 2
 Bottle 14 8 oz Plastic H2SO4 pH < 2
 Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
 Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
 Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
 Bottle 18 Plastic 1 liter unpreserved
 Bottle 19 Cr+6 Preserved 250 Polyethylene
 Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
 Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
 Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
 Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
 Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
 Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
 Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
 Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
 Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
 Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
 Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 2540 C-2015	11	1122168	06/03/2024	1122168	06/03/2024
EPA 351.2 2	28	1121658	05/31/2024	1122132	06/04/2024

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SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 5310 C-2014	15	1122326	06/05/2024	1122326	06/05/2024
SM 4500-P E-2011	13	1121996	06/03/2024	1121996	06/03/2024

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SPACEX
Rodolfo Longoria
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Brownsville, TX 78521

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 2540 D-2015	11	1121687	05/30/2024	1121687	05/30/2024
SM 2130 B-2011	11	1123697	06/11/2024	1123697	06/11/2024

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Sample	Sample ID	Taken	Time	Received
2302895	RETENTION POND	05/29/2024	18:30:00	05/30/2024

- Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 04 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 05 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 06 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 07 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 08 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 09 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 Polyethylene 1/2 gal (White)
Bottle 12 16 oz HNO3 Metals Plastic
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 16 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 Plastic 1 liter unpreserved
Bottle 19 Cr+6 Preserved 250 Polyethylene
Bottle 20 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1121581) Volume: 6.00000 mL <== Derived from 13 (6 ml)
Bottle 21 BOD Titration Beaker A (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 22 BOD Analytical Beaker B (Batch 1121637) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 24 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 25 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121649) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 26 BOD Titration Beaker A (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1121636) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1121658) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1121666) Volume: 10.00000 mL <== Derived from 17 (5 ml)
Bottle 30 Prepared Bottle: ICP Preparation for Metals (Batch 1121672) Volume: 50.00000 mL <== Derived from 12 (50 ml)
Bottle 31 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 32 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 33 Prepared Bottle: Mercury Preparation for Metals (Batch 1121865) Volume: 50.00000 mL <== Derived from 12 (25 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1121954) Volume: 1.00000 mL <== Derived from 02 (1012 ml)
Bottle 35 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1121972) Volume: 10.00000 mL <== Derived from 01 (605 ml)
Bottle 36 Prepared Bottle: 2 mL Autosampler Vial (Batch 1122298) Volume: 1.00000 mL <== Derived from 09 (892 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 4500-H+ B-2011		1121148	05/28/2024	1121148	05/28/2024

Email: Kilgore.ProjectManagement@spllabs.com

SPAC-R

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SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1105141

Printed: 06/26/2024

Retention Pond

RESULTS

Sample Results

2302895 RETENTION POND

Received: 05/30/2024

Non-Potable Water

Collected by: Client
Taken: 05/29/2024

SPACEX
18:30:00

PO: 2605353

Prepared: 06/19/2024 14:37:00 Analyzed 06/19/2024 14:37:00 WJP

Parameter	Results	Units	RL	Flags	CAS	Bottle
Check Limits	Completed					

ASTM D7065-11 Prepared: 1122298 06/05/2024 14:00:00 Analyzed 1122871 06/06/2024 17:35:00 DWL

Parameter	Results	Units	RL	Flags	CAS	Bottle
Nonylphenol	<33.6	ug/L	33.6		25154-52-3	36

Calculation Prepared: 06/06/2024 14:32:29 Calculated 06/06/2024 14:32:29 CAL

Parameter	Results	Units	RL	Flags	CAS	Bottle
Trivalent Chromium	<0.003	mg/L	0.003		16065-83-1	

Client Prepared: 1121027 05/28/2024 03:56:00 Analyzed 1121027 05/28/2024 03:56:00 CLI

Parameter	Results	Units	RL	Flags	CAS	Bottle
Cl2 Res(Total) Analyzed by client	0.20	mg/L				

EPA 1664B (HEM) Prepared: 1122457 06/05/2024 10:00:00 Analyzed 1122457 06/05/2024 10:00:00 MAX

Parameter	Results	Units	RL	Flags	CAS	Bottle
Oil and Grease (HEM)	3.60	mg/L	4.49	J		08

EPA 200.7 4.4 Prepared: 1121672 05/31/2024 08:00:00 Analyzed 1123498 06/12/2024 10:21:00 KBI

Parameter	Results	Units	RL	Flags	CAS	Bottle
Calcium	83.3	mg/L	0.500		7440-70-2	30
Iron, Total	0.702	mg/L	0.007		7439-89-6	30



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SPAC-R

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SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1105141

Printed: 06/26/2024

2302895 RETENTION POND

Received: 05/30/2024

Non-Potable Water

Collected by: Client
Taken: 05/29/2024

SPACEX
18:30:00

PO: 2605353

EPA 200.8 5.4 Prepared: 1121672 05/31/2024 08:00:00 Analyzed 1122038 06/03/2024 12:30:00 JC2

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Aluminum, Total	0.0702	mg/L	0.00171		7429-90-5	30
NELAC	Arsenic, Total	0.00188	mg/L	0.0005		7440-38-2	30
NELAC	Barium, Total	0.0943	mg/L	0.001		7440-39-3	30
NELAC	Beryllium, Total	<0.000139	mg/L	0.000139		7440-41-7	30
NELAC	Cadmium, Total	0.000107	mg/L	0.001	J	7440-43-9	30
NELAC	Chromium, Total	0.00155	mg/L	0.001		7440-47-3	30
NELAC	Copper, Total	0.00949	mg/L	0.00155		7440-50-8	30
NELAC	Lead, Total	<0.000244	mg/L	0.000244		7439-92-1	30
NELAC	Nickel, Total	0.00626	mg/L	0.00112		7440-02-0	30
NELAC	Silver, Total	<0.000226	mg/L	0.000226		7440-22-4	30
NELAC	Thallium, Total	<0.000106	mg/L	0.000106		7440-28-0	30
NELAC	Zinc, Total	1.42	mg/L	0.001		7440-66-6	30

EPA 200.8 5.4 Prepared: 1121672 05/31/2024 08:00:00 Analyzed 1122450 06/06/2024 02:19:00 JC2

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Selenium, Total	0.00286	mg/L	0.002		7782-49-2	30

EPA 200.8 5.4 Prepared: 1121672 05/31/2024 08:00:00 Analyzed 1123260 06/10/2024 21:41:00 JC2

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Antimony, Total	0.00189	mg/L	0.003	J	7440-36-0	30

EPA 200.8 5.4 Prepared: 1121672 05/31/2024 08:00:00 Analyzed 1123699 06/12/2024 08:56:00 JC2

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Manganese, Total	0.059	mg/L	0.0005		7439-96-5	30

EPA 245.1 3 Prepared: 1121865 06/03/2024 10:30:00 Analyzed 1121966 06/03/2024 13:29:00 KB1

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Mercury, Total	<0.113	ug/L	0.113		7439-97-6	31

EPA 300.0 2.1 Prepared: 1121871 05/31/2024 13:17:00 Analyzed 1121871 05/31/2024 13:17:00 NAZ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Chloride	182	mg/L	3.00			01
NELAC	Fluoride	0.970	mg/L	0.500	J		01



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SPAC-R

Page 3 of 12

SPACE X
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1105141

Printed: 06/26/2024

2302895 RETENTION POND

Received: 05/30/2024

Non-Potable Water Collected by: Client SPACE X PO: 2605353
Taken: 05/29/2024 18:30:00

EPA 300.0 2.1 Prepared: 1121871 05/31/2024 13:17:00 Analyzed 1121871 05/31/2024 13:17:00 NAZ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Nitrate-Nitrogen Total	1.20	mg/L	0.100		14797-55-8	01

EPA 300.0 2.1 Prepared: 1122502 06/05/2024 13:36:00 Analyzed 1122502 06/05/2024 13:36:00 NAZ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Sulfate	282	mg/L	30.0			01

EPA 350.1 2 Prepared: 1121581 05/30/2024 15:18:42 Analyzed 1122206 06/04/2024 07:02:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Ammonia Nitrogen	0.121	mg/L	0.020			20

EPA 351.2 2 Prepared: 1121658 05/31/2024 08:22:52 Analyzed 1122132 06/04/2024 08:23:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Kjeldahl Nitrogen	0.064	mg/L	0.050		7727-37-9	28

EPA 351.2 minus EPA 350.1 Prepared: 06/05/2024 08:55:57 Calculated 06/05/2024 08:55:57 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
z	Nitrogen, Total Organic (as N)	<0.050	mg/L	0.050			

EPA 608.3 Prepared: 1121972 06/03/2024 14:30:00 Analyzed 1122623 06/06/2024 01:55:00 KAP

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	PCB-1016	<0.334	ug/L	0.334	X	12674-11-2	35
NELAC	PCB-1221	<0.331	ug/L	0.331		11104-28-2	35
NELAC	PCB-1232	<0.331	ug/L	0.331		11141-16-5	35
NELAC	PCB-1242	<0.331	ug/L	0.331		53469-21-9	35
NELAC	PCB-1248	<0.331	ug/L	0.331		12672-29-6	35
NELAC	PCB-1254	<0.331	ug/L	0.331		11097-69-1	35
NELAC	PCB-1260	<0.331	ug/L	0.331		11096-82-5	35
NELAC	PCB-1262	<0.331	ug/L	0.331		37324-23-5	35
NELAC	PCB-1268	<0.331	ug/L	0.331		11100-14-4	35



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SPACE X
 Rodolfo Longoria
 Space Exploration Technologies
 1 Rocket Rd
 Brownsville, TX 78521

Project
1105141

Printed: 06/26/2024

2302895 RETENTION POND

Received: 05/30/2024

Non-Potable Water Collected by: Client SPACE X PO: 2605353
 Taken: 05/29/2024 18:30:00

EPA 624.1 Prepared: 1121678 05/30/2024 17:55:00 Analyzed 1121678 05/30/2024 17:55:00 MRI

Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC Acrolein	<4.00	ug/L	4.00	X	107-02-8	04
NELAC Acrylonitrile	<1.00	ug/L	1.00		107-13-1	04

EPA 624.1 Prepared: 1121680 05/30/2024 19:47:00 Analyzed 1121680 05/30/2024 19:47:00 MRI

Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC 1,1,1-Trichloroethane	<1.00	ug/L	1.00		71-55-6	07
NELAC 1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00		79-34-5	07
NELAC 1,1,2-Trichloroethane	<1.00	ug/L	1.00		79-00-5	07
NELAC 1,1-Dichloroethane	<1.00	ug/L	1.00		75-34-3	07
NELAC 1,1-Dichloroethylene	<1.00	ug/L	1.00		75-35-4	07
NELAC 1,2-Dibromoethane (EDB)	<1.00	ug/L	1.00		106-93-4	07
NELAC 1,2-Dichloroethane	<1.00	ug/L	1.00		107-06-2	07
NELAC 1,2-Dichloropropane	<1.00	ug/L	1.00		78-87-5	07
NELAC 2-Chloroethylvinyl ether	<1.00	ug/L	1.00		110-75-8	07
NELAC Benzene	<1.00	ug/L	1.00		71-43-2	07
NELAC Bromodichloromethane	<1.00	ug/L	1.00		75-27-4	07
NELAC Bromoform	<1.00	ug/L	1.00		75-25-2	07
NELAC Bromomethane (Methyl Bromi	<1.00	ug/L	1.00		74-83-9	07
NELAC Carbon Tetrachloride	<1.00	ug/L	1.00		56-23-5	07
NELAC Chlorobenzene	<1.00	ug/L	1.00		108-90-7	07
NELAC Chloroethane	<1.12	ug/L	1.12		75-00-3	07
NELAC Chloroform	<1.00	ug/L	1.00		67-66-3	07
NELAC Chloromethane (Methyl Chloride)	<1.00	ug/L	1.00		74-87-3	07
NELAC cis-1,3-Dichloropropene	<1.00	ug/L	1.00		10061-01-5	07
NELAC Dibromochloromethane	<1.00	ug/L	1.00		124-48-1	07
NELAC Dichloromethane	<1.02	ug/L	1.02		75-09-2	07
NELAC Ethylbenzene	<1.00	ug/L	1.00		100-41-4	07
NELAC m-Dichlorobenzene (1,3-DCB)	<1.00	ug/L	1.00		541-73-1	07
NELAC Methyl ethyl ketone (Butanone)	<1.00	ug/L	1.00		78-93-3	07
NELAC o-Dichlorobenzene (1,2-DCB)	<1.00	ug/L	1.00		95-50-1	07
NELAC p-Dichlorobenzene (1,4-DCB)	<1.00	ug/L	1.00		106-46-7	07
NELAC Tetrachloroethylene	<1.00	ug/L	1.00		127-18-4	07
NELAC Toluene	<1.00	ug/L	1.00		108-88-3	07
NELAC trans-1,2-Dichloroethylene	<1.00	ug/L	1.00		156-60-5	07
NELAC trans-1,3-Dichloropropene	<1.00	ug/L	1.00		10061-02-6	07
NELAC Trichloroethylene	<1.00	ug/L	1.00		79-01-6	07



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SPAC-R

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SPACE X
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1105141

Printed: 06/26/2024

2302895 RETENTION POND

Received: 05/30/2024

Non-Potable Water

Collected by: Client
Taken: 05/29/2024

SPACE X
18:30:00

PO: 2605353

EPA 624.1 Prepared: 1121680 05/30/2024 19:47:00 Analyzed 1121680 05/30/2024 19:47:00 MRI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Vinyl chloride	<1.00	ug/L	1.00		75-01-4	07

EPA 624.1 Prepared: 1121680 05/31/2024 12:46:07 Calculated 1121680 05/31/2024 12:46:07 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Trihalomethanes	<0.001	mg/L	0.001			07

EPA 625.1 Prepared: 1121954 06/03/2024 14:00:00 Analyzed 1124511 06/17/2024 20:50:00 PMI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	1,2,4,5-Tetrachlorobenzene	<1.02	ug/L	1.02	X	95-94-3	34
NELAC	1,2,4-Trichlorobenzene	<0.988	ug/L	0.988		120-82-1	34
NELAC	1,2-Dichlorobenzene	<4.94	ug/L	4.94		95-50-1	34
NELAC	1,2-DPH (as azobenzene)	<0.988	ug/L	0.988		122-66-7	34
NELAC	1,3-Dichlorobenzene	<4.94	ug/L	4.94	X	541-73-1	34
NELAC	1,4-Dichlorobenzene	<4.94	ug/L	4.94	X	106-46-7	34
NELAC	2,4,5-Trichlorophenol	<4.94	ug/L	4.94		95-95-4	34
NELAC	2,4,6-Trichlorophenol	<1.98	ug/L	1.98		88-06-2	34
NELAC	2,4-Dichlorophenol	<0.988	ug/L	0.988		120-83-2	34
NELAC	2,4-Dimethylphenol	<0.988	ug/L	0.988	S	105-67-9	34
NELAC	2,4-Dinitrophenol	<1.98	ug/L	1.98		51-28-5	34
NELAC	2,4-Dinitrotoluene	<1.98	ug/L	1.98		121-14-2	34
NELAC	2,6-Dinitrotoluene	<1.98	ug/L	1.98		606-20-2	34
NELAC	2-Chloronaphthalene	<0.988	ug/L	0.988		91-58-7	34
NELAC	2-Chlorophenol	<0.988	ug/L	0.988		95-57-8	34
NELAC	2-Methylphenol (o-Cresol)	<9.88	ug/L	9.88		95-48-7	34
NELAC	2-Nitrophenol	<0.988	ug/L	0.988		88-75-5	34
NELAC	3&4-Methylphenol (m&p-Cresol)	<7.91	ug/L	7.91		MEPH34	34
NELAC	3,3'-Dichlorobenzidine	<1.98	ug/L	1.98		91-94-1	34
NELAC	4,6-Dinitro-2-methylphenol	<1.98	ug/L	1.98		534-52-1	34
NELAC	4-Bromophenyl phenyl ether	<0.988	ug/L	0.988		101-55-3	34
NELAC	4-Chlorophenyl phenyl ethe	<0.988	ug/L	0.988		7005-72-3	34
NELAC	4-Nitrophenol	<0.988	ug/L	0.988		100-02-7	34
NELAC	Acenaphthene	<0.988	ug/L	0.988		83-32-9	34
NELAC	Acenaphthylene	<0.988	ug/L	0.988		208-96-8	34
z	Aniline	<2.44	ug/L	2.44	S	62-53-3	34



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SPAC-R

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SPACE X
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1105141

Printed: 06/26/2024

2302895 RETENTION POND

Received: 05/30/2024

Non-Potable Water

Collected by: Client
Taken: 05/29/2024

SPACE X
18:30:00

PO: 2605353

EPA 625.1 Prepared: 1121954 06/03/2024 14:00:00 Analyzed 1124511 06/17/2024 20:50:00 PMI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Anthracene	<0.988	ug/L	0.988		120-12-7	34
NELAC	Benidine	<1.48	ug/L	1.48		92-87-5	34
NELAC	Benzo(a)anthracene	<0.988	ug/L	0.988		56-55-3	34
NELAC	Benzo(a)pyrene	<0.988	ug/L	0.988		50-32-8	34
NELAC	Benzo(b)fluoranthene	<0.988	ug/L	0.988		205-99-2	34
NELAC	Benzo(ghi)perylene	<0.988	ug/L	0.988		191-24-2	34
NELAC	Benzo(k)fluoranthene	<0.988	ug/L	0.988		207-08-9	34
NELAC	Benzyl Butyl phthalate	<7.41	ug/L	7.41		85-68-7	34
NELAC	Bis(2-chloroethoxy)methane	<0.988	ug/L	0.988		111-91-1	34
NELAC	Bis(2-chloroethyl)ether	<0.988	ug/L	0.988		111-44-4	34
NELAC	Bis(2-chloroisopropyl)ether	<0.988	ug/L	0.988		108-60-1	34
NELAC	Bis(2-ethylhexyl)phthalate	<7.41	ug/L	7.41		117-81-7	34
NELAC	Chrysene (Benzo(a)phenanthrene)	<0.988	ug/L	0.988		218-01-9	34
NELAC	Dibenz(a,h)anthracene	<0.988	ug/L	0.988		53-70-3	34
NELAC	Diethyl phthalate	<5.63	ug/L	5.63		84-66-2	34
NELAC	Dimethyl phthalate	<4.74	ug/L	4.74		131-11-3	34
NELAC	Di-n-butylphthalate	<7.41	ug/L	7.41		84-74-2	34
NELAC	Di-n-octylphthalate	<1.98	ug/L	1.98		117-84-0	34
NELAC	Fluoranthene(Benzo(j,k)fluorene)	<0.988	ug/L	0.988		206-44-0	34
NELAC	Fluorene	<0.988	ug/L	0.988		86-73-7	34
NELAC	Hexachlorobenzene	<0.988	ug/L	0.988		118-74-1	34
NELAC	Hexachlorobutadiene	<1.02	ug/L	1.02		87-68-3	34
NELAC	Hexachlorocyclopentadiene	<0.988	ug/L	0.988		77-47-4	34
NELAC	Hexachloroethane	<1.98	ug/L	1.98		67-72-1	34
NELAC	Indeno(1,2,3-cd)pyrene	<0.988	ug/L	0.988		193-39-5	34
NELAC	Isophorone	<0.988	ug/L	0.988		78-59-1	34
NELAC	Naphthalene	<0.988	ug/L	0.988		91-20-3	34
NELAC	Nitrobenzene	<0.988	ug/L	0.988		98-95-3	34
NELAC	n-Nitrosodiethylamine	<0.988	ug/L	0.988	X	55-18-5	34
NELAC	N-Nitrosodimethylamine	<0.988	ug/L	0.988		62-75-9	34
NELAC	n-Nitroso-di-n-butylamine	<0.988	ug/L	0.988		924-16-3	34
NELAC	N-Nitrosodi-n-propylamine	<0.988	ug/L	0.988		621-64-7	34
NELAC	N-Nitrosodiphenylamine (as DPA	<0.988	ug/L	0.988		86-30-6	34
NELAC	p-Chloro-m-Cresol (4-Chloro-3-me	<0.988	ug/L	0.988		59-50-7	34
NELAC	Pentachlorobenzene	<0.988	ug/L	0.988		608-93-5	34
NELAC	Pentachlorophenol	<4.94	ug/L	4.94		87-86-5	34



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SPAC-R

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SPACE X
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1105141

Printed: 06/26/2024

2302895 RETENTION POND

Received: 05/30/2024

Non-Potable Water

Collected by: Client
Taken: 05/29/2024

SPACE X
18:30:00

PO: 2605353

EPA 625.1 Prepared: 1121954 06/03/2024 14:00:00 Analyzed 1124511 06/17/2024 20:50:00 PMI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Phenanthrene	<0.988	ug/L	0.988		85-01-8	34
NELAC	Phenol	<0.988	ug/L	0.988		108-95-2	34
NELAC	Pyrene	<0.988	ug/L	0.988		129-00-0	34
NELAC	Pyridine	<1.33	ug/L	1.33	X	110-86-1	34

EPA 625.1 Prepared: 1121954 06/03/2024 14:00:00 Calculated 1124511 06/19/2024 13:56:10 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cresols Total	<7.91	ug/L	7.91		1319-77-3, etc.	34

SM 2130 B-2011 Prepared: 1123697 06/11/2024 15:25:00 Analyzed 1123697 06/11/2024 15:25:00 TRC

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Turbidity	2.55	NTU	0.300	H		11

SM 2320 B-2011 Prepared: 1122797 06/07/2024 09:23:00 Analyzed 1122797 06/07/2024 09:23:00 KNI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Alkalinity (as CaCO3)	136	mg/L	1.00			18

SM 2540 C-2015 Prepared: 1122168 06/03/2024 08:30:00 Analyzed 1122168 06/03/2024 08:30:00 ADR

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Dissolved Solids	950	mg/L	50.0			11

SM 2540 D-2015 Prepared: 1121687 05/30/2024 15:00:00 Analyzed 1121687 05/30/2024 15:00:00 ADR

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Suspended Solids	7.50	mg/L	2.00			11

SM 3500-Cr B-2011 Prepared: 1121254 05/29/2024 18:30:00 Analyzed 1121254 05/29/2024 18:30:00 JMZ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Hex Cr, Field Preservation	preserved	ug/L	3		18540-29-9	



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SPACE X
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1105141

Printed: 06/26/2024

2302895 RETENTION POND

Received: 05/30/2024

Non-Potable Water

Collected by: Client
Taken: 05/29/2024

SPACE X
18:30:00

PO: 2605353

SM 3500-Cr B-2011 Prepared: 1122575 06/05/2024 09:00:00 Analyzed 1122575 06/05/2024 09:00:00 ALB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Hexavalent Chromium	<3.00	ug/L	3.00		18540-29-9	19

SM 4500-CN⁻E-2016 Prepared: 1121649 05/31/2024 07:45:07 Analyzed 1122121 06/04/2024 13:35:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cyanide, total	<0.00238	mg/L	0.00238			23

SM 4500-CN⁻G-2016 Prepared: 06/04/2024 16:15:50 Calculated 06/04/2024 16:15:50 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cyanide - Available/Amenable	<0.00238	mg/L	0.00238			

SM 4500-CN⁻G-2016 Prepared: 1121666 05/31/2024 09:01:54 Analyzed 1122125 06/04/2024 13:35:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cyanide After Chlorination	<0.00238	mg/L	0.00238			29

SM 4500-H+ B-2011 Prepared: 1121148 05/28/2024 03:56:00 Analyzed 1121148 05/28/2024 03:56:00 CLI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
z	pH Client Provided	6.97	SU	0			

SM 4500-P E-2011 Prepared: 1121996 06/03/2024 12:10:00 Analyzed 1121996 06/03/2024 12:10:00 TRC

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Phosphorus (as P), total	0.0241	mg/L	0.00311		7723-14-0	13

SM 5210 B-2016 Prepared: 1121636 05/31/2024 Analyzed 1121636 06/05/2024 13:39:32 ESN

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Biochemical Oxygen Demand (BOD5)	8.49	mg/L	2.00		1026-3	01

SM 5210 B-2016 (TCMP Inhibitor) Prepared: 1121637 05/31/2024 Analyzed 1121637 06/05/2024 12:51:39 ESN

	Parameter	Results	Units	RL	Flags	CAS	Bottle



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Brownsville, TX 78521

Project
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Printed: 06/26/2024

2302895 RETENTION POND

Received: 05/30/2024

Non-Potable Water Collected by: Client SPACE X PO: 2605353
Taken: 05/29/2024 18:30:00

SM 5210 B-2016 (TCMP Inhibitor) Prepared: 1121637 05/31/2024 Analyzed 1121637 06/05/2024 12:51:39 ESN

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	BOD Carbonaceous	2.08	mg/L	2.00			01

SM 5220 D-2011 Prepared: 1121775 05/31/2024 11:00:00 Analyzed 1121775 05/31/2024 11:00:00 HLT

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Chemical Oxygen Demand	<20.0	mg/L	20.0			13

SM 5310 C-2014 Prepared: 1122326 06/05/2024 12:13:00 Analyzed 1122326 06/05/2024 12:13:00 MAG

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Organic Carbon	3.53	mg/L	0.500			15

Sample Preparation

2302895 RETENTION POND

Received: 05/30/2024

05/29/2024

2605353

Prepared: 12/31/1899 10:21:18 Calculated 10:21:18 CAL

z Environmental Fee (per Project) Verified

ASTM D7065-11 Prepared: 1122298 06/05/2024 14:00:00 Analyzed 1122871 06/06/2024 17:35:00 DWL

z Nonyl Phenol Expansion Entered 36

EPA 1664B (HEM) Prepared: 1122284 06/05/2024 10:00:00 Analyzed 1122284 06/05/2024 10:00:00 MAX

NELAC O&G HEM Started Started



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2302895 RETENTION POND

Received: 05/30/2024
2605353

05/29/2024

EPA 200.2 2.8		Prepared: 1121672	05/31/2024	08:00:00	Analyzed 1121672	05/31/2024	08:00:00	HLT
z	Liquid Metals Digestion	50/50	ml					12
EPA 245.1 3		Prepared: 1121865	06/03/2024	10:30:00	Analyzed 1121865	06/03/2024	10:30:00	ALB
NELAC	Mercury Liquid Metals Digestion	50/25	ml					12
EPA 350.2, Rev. 2.0		Prepared: 1121581	05/30/2024	15:18:42	Analyzed 1121581	05/30/2024	15:18:42	SRJ
NELAC	Ammonia Distillation	6/6	ml					13
EPA 351.2, Rev 2.0		Prepared: 1121658	05/31/2024	08:22:52	Analyzed 1121658	05/31/2024	08:22:52	MEG
NELAC	TKN Block Digestion	20/20	ml					14
EPA 608.3		Prepared: 1121972	06/03/2024	14:30:00	Analyzed 1121972	06/03/2024	14:30:00	MCC
	PCB Liq-Liq Extr. W/Hex Exch.	10/605	ml					01
EPA 608.3		Prepared: 1121972	06/03/2024	14:30:00	Analyzed 1122623	06/06/2024	01:55:00	KAP
NELAC	Polychlorinated Biphenyls	Entered						35
EPA 624.1		Prepared: 1121678	05/30/2024	17:55:00	Analyzed 1121678	05/30/2024	17:55:00	MR1
NELAC	Acrolein/Acrylonitrile Exp.	Entered						04
EPA 624.1		Prepared: 1121680	05/30/2024	19:47:00	Analyzed 1121680	05/30/2024	19:47:00	MR1
z	Table D-1/D-2 Volatile Expansion	Entered						07



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2302895 RETENTION POND

Received: 05/30/2024
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05/29/2024

EPA 625.1		Prepared:	1121954	06/03/2024	14:00:00	Analyzed	1121954	06/03/2024	14:00:00	MCC	
Liquid-Liquid Extraction, BNA		1/1012	ml							02	
EPA 625.1		Prepared:	1121954	06/03/2024	14:00:00	Analyzed	1124511	06/17/2024	20:50:00	PMI	
NELAC	Table D-1/ D-2 Semivolatiles Exp	Entered									34
EPA 625.1		Prepared:	1122298	06/05/2024	14:00:00	Analyzed	1122298	06/05/2024	14:00:00	MCC	
Nonylphenol Liq-Liq Extract		1/892	ml							09	
SM 2540 C-2015		Prepared:	1121816	06/03/2024	08:30:00	Analyzed	1121816	06/03/2024	08:30:00	ADR	
NELAC	Total Dissolved Solids Started	Started									
SM 2540 D-2011		Prepared:	1121228	05/30/2024	15:00:00	Analyzed	1121228	05/30/2024	15:00:00	ADR	
NELAC	TSS Set Started	Started									
SM 4500-CN ⁻ C-2016		Prepared:	1121649	05/31/2024	07:45:07	Analyzed	1121649	05/31/2024	07:45:07	MEG	
NELAC	Cyanide Distillation	10/5	ml							17	
SM 4500-CN ⁻ C-2016		Prepared:	1121666	05/31/2024	09:01:54	Analyzed	1121666	05/31/2024	09:01:54	MEG	
NELAC	CN Dist After Chlorination	10/5	ml							17	
SM 5210 B-2016		Prepared:	1121636	05/31/2024		Analyzed	1121636	05/31/2024	06:51:30	ESN	
NELAC	BOD Set Started	Started									



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SPACE X
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 1 Rocket Rd
 Brownsville, TX 78521

Project
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Printed: 06/26/2024

2302895 RETENTION POND

Received: 05/30/2024
 2605353

05/29/2024

SM 5210 B-2016 (TCMP Inhibitor)

Prepared: 1121637 05/31/2024

Analyzed 1121637 05/31/2024 06:51:30 ESN

NELAC **BODc Set Started**

Started

Qualifiers:

J - Analyte detected below quantitation limit
 X - Standard reads higher than desired.
 H - Sample started outside recommended holding time
 S - Standard reads lower than desired

We report results on an As Received (or Wet) basis unless marked Dry Weight.

Unless otherwise noted, testing was performed at SPL, Inc.- Kilgore laboratory which holds International, Federal, and state accreditations. Please see our Websites for details.

(N)ELAC - Covered in our NELAC scope of accreditation
 z -- Not covered by our NELAC scope of accreditation

These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of SPL Kilgore. Unless otherwise specified, these test results meet the requirements of NELAC.
 RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.



Bill Peery, MS, VP Technical Services



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QUALITY CONTROL



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SPAC-R

SPACE
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

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Printed 06/26/2024

Analytical Set

1121636

SM 5210 B-2016

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Biochemical Oxygen Demand (BOD5)	1121636	0.2	0.200	0.500	mg/L	126385424
Biochemical Oxygen Demand (BOD5)	1121636	0.2	0.200	0.500	mg/L	126385476
Biochemical Oxygen Demand (BOD5)	1121636	0.2	0.200	0.500	mg/L	126385536

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Biochemical Oxygen Demand (BOD5)	2302815	17.2	18.0	mg/L	4.55	30.0
Biochemical Oxygen Demand (BOD5)	2302842	64.2	62.7	mg/L	2.36	30.0
Biochemical Oxygen Demand (BOD5)	2302972	8.48	11.4	mg/L	29.4	30.0
Biochemical Oxygen Demand (BOD5)	2303089	91.2	81.3	mg/L	11.5	30.0
Biochemical Oxygen Demand (BOD5)	2303148	9.52	9.70	mg/L	1.87	30.0
Biochemical Oxygen Demand (BOD5)	2303336	40.9	30.4	mg/L	29.5	30.0
Biochemical Oxygen Demand (BOD5)	2303410	4.83	4.19	mg/L	14.2	30.0

Seed Drop

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Biochemical Oxygen Demand (BOD5)	1121636	0.697	0.200	0.500	mg/L	126385426
Biochemical Oxygen Demand (BOD5)	1121636	0.850	0.200	0.500	mg/L	126385478
Biochemical Oxygen Demand (BOD5)	1121636	1.04	0.200	0.500	mg/L	126385538

Standard

Parameter	Sample	Reading	Known	Units	Recover%	Limits%	File
Biochemical Oxygen Demand (BOD5)		226	198	mg/L	114	83.7 - 116	126385427
Biochemical Oxygen Demand (BOD5)		218	198	mg/L	110	83.7 - 116	126385479
Biochemical Oxygen Demand (BOD5)		216	198	mg/L	109	83.7 - 116	126385539

Analytical Set

1121637

SM 5210 B-2016 (TCMP Inhibitor)

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
BOD Carbonaceous	1121637	0.2	0.200	0.500	mg/L	126385562
BOD Carbonaceous	1121637	0.2	0.200	0.500	mg/L	126385614
BOD Carbonaceous	1121637	0.2	0.200	0.500	mg/L	126385664

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
BOD Carbonaceous	2302827	3.48	3.04	mg/L	13.5	30.0
BOD Carbonaceous	2302936	ND	ND	mg/L		30.0
BOD Carbonaceous	2303036	3.00	2.84	mg/L	5.48	30.0
BOD Carbonaceous	2303169	2.40	ND	mg/L	200 *	30.0
BOD Carbonaceous	2303211	2.48	2.28	mg/L	8.40	30.0

Seed Drop

Parameter	PrepSet	Reading	MDL	MQL	Units	File
BOD Carbonaceous	1121637	0.830	0.200	0.500	mg/L	126385564
BOD Carbonaceous	1121637	0.880	0.200	0.500	mg/L	126385616

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SPAC-R

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Brownsville, TX 78521

Project
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Printed 06/26/2024

Seed Drop

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
BOD Carbonaceous	1121637	0.840	0.200	0.500	mg/L	126385666

Standard

<u>Parameter</u>	<u>Sample</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
BOD Carbonaceous		226	198	mg/L	114	83.7 - 116	126385565
BOD Carbonaceous		217	198	mg/L	110	83.7 - 116	126385617
BOD Carbonaceous		219	198	mg/L	111	83.7 - 116	126385667

Analytical Set

1122121

SM 4500-CN⁻ E-2016

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Cyanide, total	1121649	ND	0.00238	0.005	mg/L	126398027

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Cyanide, total	0.518	0.500	mg/L	104	90.0 - 110	126398017
Cyanide, total	0.536	0.500	mg/L	107	90.0 - 110	126398028
Cyanide, total	0.534	0.500	mg/L	107	90.0 - 110	126398035
Cyanide, total	0.522	0.500	mg/L	104	90.0 - 110	126398036
Cyanide, total	0.534	0.500	mg/L	107	90.0 - 110	126398037
Cyanide, total	0.536	0.500	mg/L	107	90.0 - 110	126398038
Cyanide, total	0.540	0.500	mg/L	108	90.0 - 110	126398039
Cyanide, total	0.522	0.500	mg/L	104	90.0 - 110	126398040
Cyanide, total	0.536	0.500	mg/L	107	90.0 - 110	126398048
Cyanide, total	0.527	0.500	mg/L	105	90.0 - 110	126398059

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Cyanide, total	2302895	ND	ND	mg/L		20.0

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Cyanide, total	0.199	0.200	mg/L	99.5	90.0 - 110	126398016

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Cyanide, total	1121649	0.361	0.364	0.400	90.0 - 110	90.2	91.0	mg/L	0.828	20.0

Mat. Spike

<u>Parameter</u>	<u>Sample</u>	<u>Spike</u>	<u>Unknown</u>	<u>Known</u>	<u>Units</u>	<u>Recovery %</u>	<u>Limits %</u>	<u>File</u>
Cyanide, total	2302895	0.362	ND	0.400	mg/L	90.5	90.0 - 110	126398033

Analytical Set

1122125

SM 4500-CN⁻ G-2016

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Cyanide After Chlorination	1121666	ND	0.00119	0.0025	mg/L	126398194

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Brownsville, TX 78521

Project
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CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Cyanide After Chlorination	0.518	0.500	mg/L	104	90.0 - 110	126398189
Cyanide After Chlorination	0.536	0.500	mg/L	107	90.0 - 110	126398190
Cyanide After Chlorination	0.534	0.500	mg/L	107	90.0 - 110	126398191
Cyanide After Chlorination	0.522	0.500	mg/L	104	90.0 - 110	126398192
Cyanide After Chlorination	0.534	0.500	mg/L	107	90.0 - 110	126398193
Cyanide After Chlorination	0.536	0.500	mg/L	107	90.0 - 110	126398200
Cyanide After Chlorination	0.540	0.500	mg/L	108	90.0 - 110	126398204
Cyanide After Chlorination	0.522	0.500	mg/L	104	90.0 - 110	126398215
Cyanide After Chlorination	0.536	0.500	mg/L	107	90.0 - 110	126398219
Cyanide After Chlorination	0.527	0.500	mg/L	105	90.0 - 110	126398220

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Cyanide After Chlorination	2302508	ND	ND	mg/L		20.0

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Cyanide After Chlorination	0.199	0.200	mg/L	99.5	90.0 - 110	126398188

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Cyanide After Chlorination	1121666	0.181	0.182	0.200	90.0 - 110	90.5	91.0	mg/L	0.551	20.0

Mat. Spike

<u>Parameter</u>	<u>Sample</u>	<u>Spike</u>	<u>Unknown</u>	<u>Known</u>	<u>Units</u>	<u>Recovery %</u>	<u>Limits %</u>	<u>File</u>
Cyanide After Chlorination	2302508	0.361	ND	0.400	mg/L	90.2	90.0 - 110	126398199

Analytical Set

1122132

EPA 351.2 2

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Total Kjeldahl Nitrogen	1121658	ND	0.00712	0.050	mg/L	126398380

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Total Kjeldahl Nitrogen	5.49	5.00	mg/L	110	90.0 - 110	126398368
Total Kjeldahl Nitrogen	5.20	5.00	mg/L	104	90.0 - 110	126398377
Total Kjeldahl Nitrogen	5.49	5.00	mg/L	110	90.0 - 110	126398388
Total Kjeldahl Nitrogen	5.49	5.00	mg/L	110	90.0 - 110	126398399
Total Kjeldahl Nitrogen	5.47	5.00	mg/L	109	90.0 - 110	126398410
Total Kjeldahl Nitrogen	5.44	5.00	mg/L	109	90.0 - 110	126398421
Total Kjeldahl Nitrogen	5.35	5.00	mg/L	107	90.0 - 110	126398432
Total Kjeldahl Nitrogen	5.29	5.00	mg/L	106	90.0 - 110	126398436
Total Kjeldahl Nitrogen	5.37	5.00	mg/L	107	90.0 - 110	126398437
Total Kjeldahl Nitrogen	4.93	5.00	mg/L	98.6	90.0 - 110	126398447
Total Kjeldahl Nitrogen	5.33	5.00	mg/L	107	90.0 - 110	126398448
Total Kjeldahl Nitrogen	5.30	5.00	mg/L	106	90.0 - 110	126398449

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QUALITY CONTROL



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SPAC-R

SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1105141

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Duplicate						
<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Total Kjeldahl Nitrogen	2302945	ND	ND	mg/L		20.0
Total Kjeldahl Nitrogen	2303187	ND	ND	mg/L		20.0

ICV						
<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Total Kjeldahl Nitrogen	5.36	5.00	mg/L	107	90.0 - 110	126398367

LCS Dup										
<i>Parameter</i>	<i>PrepSet</i>	<i>LCS</i>	<i>LCSD</i>	<i>Known</i>	<i>Limits%</i>	<i>LCS%</i>	<i>LCSD%</i>	<i>Units</i>	<i>RPD</i>	<i>Limit%</i>
Total Kjeldahl Nitrogen	1121658	4.73	4.67	5.00	90.0 - 110	94.6	93.4	mg/L	1.28	20.0

Mat. Spike									
<u>Parameter</u>	<u>Sample</u>	<u>Spike</u>	<u>Unknown</u>	<u>Known</u>	<u>Units</u>	<u>Recovery %</u>	<u>Limits %</u>	<u>File</u>	
Total Kjeldahl Nitrogen	2302945	-0.541	ND	5.00	mg/L	0	80.0 - 120	126398385	*
Total Kjeldahl Nitrogen	2303187	4.77	ND	5.00	mg/L	95.4	80.0 - 120	126398389	

Analytical Set 1122206

EPA 350.1 2

Blank						
<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Ammonia Nitrogen	1121581	ND	0.00336	0.020	mg/L	126399578

CCV						
<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Ammonia Nitrogen	2.11	2.00	mg/L	106	90.0 - 110	126399560
Ammonia Nitrogen	2.17	2.00	mg/L	108	90.0 - 110	126399569
Ammonia Nitrogen	2.18	2.00	mg/L	109	90.0 - 110	126399576
Ammonia Nitrogen	2.18	2.00	mg/L	109	90.0 - 110	126399587
Ammonia Nitrogen	2.14	2.00	mg/L	107	90.0 - 110	126399598
Ammonia Nitrogen	2.05	2.00	mg/L	102	90.0 - 110	126399608
Ammonia Nitrogen	2.13	2.00	mg/L	106	90.0 - 110	126399616
Ammonia Nitrogen	2.15	2.00	mg/L	108	90.0 - 110	126399619
Ammonia Nitrogen	2.18	2.00	mg/L	109	90.0 - 110	126399628
Ammonia Nitrogen	2.17	2.00	mg/L	108	90.0 - 110	126399639
Ammonia Nitrogen	2.14	2.00	mg/L	107	90.0 - 110	126399647
Ammonia Nitrogen	2.12	2.00	mg/L	106	90.0 - 110	126399658
Ammonia Nitrogen	2.12	2.00	mg/L	106	90.0 - 110	126399668
Ammonia Nitrogen	2.10	2.00	mg/L	105	90.0 - 110	126399672
Ammonia Nitrogen	2.12	2.00	mg/L	106	90.0 - 110	126399677
Ammonia Nitrogen	2.15	2.00	mg/L	108	90.0 - 110	126399685
Ammonia Nitrogen	2.12	2.00	mg/L	106	90.0 - 110	126399696
Ammonia Nitrogen	2.14	2.00	mg/L	107	90.0 - 110	126399707
Ammonia Nitrogen	2.10	2.00	mg/L	105	90.0 - 110	126399715
Ammonia Nitrogen	2.11	2.00	mg/L	106	90.0 - 110	126399717

Duplicate						
<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>

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SPACEX
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Brownsville, TX 78521

Project
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Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Ammonia Nitrogen	2302876	0.138	0.142	mg/L	2.86	20.0
Ammonia Nitrogen	2302888	0.090	0.086	mg/L	4.55	20.0

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Ammonia Nitrogen	2.18	2.00	mg/L	109	90.0 - 110	126399559

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Ammonia Nitrogen	1121581	2.09	2.10	2.00	90.0 - 110	104	105	mg/L	0.477	20.0

Mat. Spike

<u>Parameter</u>	<u>Sample</u>	<u>Spike</u>	<u>Unknown</u>	<u>Known</u>	<u>Units</u>	<u>Recovery %</u>	<u>Limits %</u>	<u>File</u>
Ammonia Nitrogen	2302876	2.11	0.142	2.00	mg/L	98.4	80.0 - 120	126399583
Ammonia Nitrogen	2302888	2.19	0.086	2.00	mg/L	105	80.0 - 120	126399586

Analytical Set

1121687

SM 2540 D-2015

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Total Suspended Solids	1121687	ND	2	2	mg/L	126387239

ControlBlk

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Total Suspended Solids	1121687	-0.0001			grams	126387238

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Total Suspended Solids	2302808	10.6	10.3	mg/L	2.87	20.0
Total Suspended Solids	2302810	8.48	8.26	mg/L	2.63	20.0

LCS

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits</u>	<u>File</u>
Total Suspended Solids	1121687	54.0	50.0	mg/L	108	90.0 - 110	126387257

Standard

<u>Parameter</u>	<u>Sample</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Total Suspended Solids		108	100	mg/L	108	90.0 - 110	126387256

Analytical Set

1122168

SM 2540 C-2015

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Total Dissolved Solids	1122168	5.00	5.00	5.00	mg/L	126398839

ControlBlk

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Total Dissolved Solids	1122168	0.0005			grams	126398826

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SPAC-R

SPACEX
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Project
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Duplicate						
Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Total Dissolved Solids	2302642	18.0	ND	mg/L	200 *	20.0

LCS						
Parameter	PrepSet	Reading	Known	Units	Recover%	File
Total Dissolved Solids	1122168	198	200	mg/L	99.0	126398840

Standard						
Parameter	Sample	Reading	Known	Units	Recover%	File
Total Dissolved Solids		90.0	100	mg/L	90.0	126398827

Analytical Set **1122457** EPA 1664B (HEM)

Blank						
Parameter	PrepSet	Reading	MDL	MQL	Units	File
Oil and Grease (HEM)	1122457	ND	0.804	4.00	mg/L	126408507

ControlBlk						
Parameter	PrepSet	Reading	MDL	MQL	Units	File
Oil and Grease (HEM)	1122457	0.0005			grams	126408506
Oil and Grease (HEM)	1122457	0.0001			grams	126408531

LCS						
Parameter	PrepSet	Reading	Known	Units	Recover%	File
Oil and Grease (HEM)	1122457	37.4	40.0	mg/L	93.5	126408508

MS										
Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD
Oil and Grease (HEM)	2302895	39.9	0	3.60	40.0	78.0 - 114	99.8		mg/L	20.0

Analytical Set **1121871** EPA 300.0 2.1

AWRL/LOQ C						
Parameter	Reading	Known	Units	Recover%	Limits%	File
Fluoride	0.120	0.100	mg/L	120	70.0 - 130	126391539
Nitrate-Nitrogen Total	0.021	0.0226	mg/L	92.9	70.0 - 130	126391539

Blank						
Parameter	PrepSet	Reading	MDL	MQL	Units	File
Chloride	1121871	ND	0.0972	0.300	mg/L	126391540
Fluoride	1121871	ND	0.010	0.100	mg/L	126391540
Nitrate-Nitrogen Total	1121871	ND	0.00745	0.0226	mg/L	126391540

CCB						
Parameter	PrepSet	Reading	MDL	MQL	Units	File
Chloride	1121871	0.025	0.0972	0.300	mg/L	126391536
Chloride	1121871	0.012	0.0972	0.300	mg/L	126391552
Chloride	1121871	0.030	0.0972	0.300	mg/L	126391568
Fluoride	1121871	0	0.010	0.100	mg/L	126391536
Fluoride	1121871	0	0.010	0.100	mg/L	126391552

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CCB

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Fluoride	1121871	0	0.010	0.100	mg/L	126391568
Nitrate-Nitrogen Total	1121871	0	0.00745	0.0226	mg/L	126391536
Nitrate-Nitrogen Total	1121871	0	0.00745	0.0226	mg/L	126391552
Nitrate-Nitrogen Total	1121871	0	0.00745	0.0226	mg/L	126391568

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Chloride	10.4	10.0	mg/L	104	90.0 - 110	126391535
Chloride	9.99	10.0	mg/L	99.9	90.0 - 110	126391551
Chloride	10.0	10.0	mg/L	100	90.0 - 110	126391567
Fluoride	10.0	10.0	mg/L	100	90.0 - 110	126391535
Fluoride	9.92	10.0	mg/L	99.2	90.0 - 110	126391551
Fluoride	9.88	10.0	mg/L	98.8	90.0 - 110	126391567
Nitrate-Nitrogen Total	2.31	2.26	mg/L	102	90.0 - 110	126391535
Nitrate-Nitrogen Total	2.25	2.26	mg/L	99.6	90.0 - 110	126391551
Nitrate-Nitrogen Total	2.21	2.26	mg/L	97.8	90.0 - 110	126391567

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Chloride	1121871	5.08	5.01	5.00	85.0 - 115	102	100	mg/L	1.39	20.0
Fluoride	1121871	4.81	4.77	5.00	88.0 - 120	96.2	95.4	mg/L	0.835	20.0
Nitrate-Nitrogen Total	1121871	1.13	1.10	1.13	88.0 - 116	100	97.3	mg/L	2.69	20.0

MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Chloride	2302484	323	323	231	100	80.0 - 120	92.0	92.0	mg/L	0	20.0
Fluoride	2302484	88.6	90.5	ND	100	80.0 - 120	88.6	90.5	mg/L	2.12	20.0
Nitrate-Nitrogen Total	2302484	22.0	22.0	0.767	22.6	80.0 - 120	94.0	94.0	mg/L	0	20.0
Chloride	2302487	1880	1840	1690	200	80.0 - 120	95.0	75.0 *	mg/L	23.5 *	20.0
Fluoride	2302487	176	177	ND	200	80.0 - 120	88.0	88.5	mg/L	0.567	20.0
Nitrate-Nitrogen Total	2302487	44.9	43.9	1.72	45.2	80.0 - 120	95.5	93.3	mg/L	2.34	20.0

Analytical Set

1122502

EPA 300.0 2.1

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Sulfate	1122502	ND	0.254	0.300	mg/L	126409510

CCB

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Sulfate	1122502	0	0.254	0.300	mg/L	126409506
Sulfate	1122502	0	0.254	0.300	mg/L	126409526
Sulfate	1122502	0	0.254	0.300	mg/L	126409538

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Sulfate	9.79	10.0	mg/L	97.9	90.0 - 110	126409505

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Project
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CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Sulfate	9.56	10.0	mg/L	95.6	90.0 - 110	126409525
Sulfate	9.60	10.0	mg/L	96.0	90.0 - 110	126409537

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Sulfate	1122502	4.68	4.68	5.00	85.0 - 115	93.6	93.6	mg/L	0	20.0

MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Sulfate	2302895	362	367	282	100	80.0 - 120	80.0	85.0	mg/L	6.06	20.0
Sulfate	2303362	411	401	340	100	80.0 - 120	71.0 *	61.0 *	mg/L	15.2	20.0

Analytical Set

1121966

EPA 245.1 3

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Mercury, Total	1121865	ND	0.113	0.200	ug/L	126393298

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Mercury, Total	4.89	5.000	ug/L	97.8	90.0 - 110	126393282
Mercury, Total	4.90	5.000	ug/L	98.0	90.0 - 110	126393283
Mercury, Total	4.84	5.000	ug/L	96.8	90.0 - 110	126393297
Mercury, Total	4.77	5.000	ug/L	95.4	90.0 - 110	126393304
Mercury, Total	4.81	5.000	ug/L	96.2	90.0 - 110	126393311

ICL

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Mercury, Total	19.9	20.00	ug/L	99.5	90.0 - 110	126393281

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Mercury, Total	4.98	5.000	ug/L	99.6	90.0 - 110	126393280

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Mercury, Total	1121865	8.94	8.99	10.0	85.0 - 115	89.4	89.9	ug/L	0.558	20.0

MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Mercury, Total	2302895	8.99	9.05	ND	10.0	70.0 - 130	89.9	90.5	ug/L	0.665	20.0

Analytical Set

1122038

EPA 200.8 5.4

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Aluminum, Total	1121672	ND	0.00171	0.00171	mg/L	126395960
Arsenic, Total	1121672	ND	0.000184	0.001	mg/L	126395960
Barium, Total	1121672	ND	0.000635	0.001	mg/L	126395960

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SPAC-R

SPACEX
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Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Beryllium, Total	1121672	ND	0.000139	0.001	mg/L	126395960
Cadmium, Total	1121672	ND	0.000067	0.001	mg/L	126395960
Chromium, Total	1121672	ND	0.000621	0.001	mg/L	126395960
Copper, Total	1121672	ND	0.00155	0.00155	mg/L	126395960
Lead, Total	1121672	ND	0.000244	0.001	mg/L	126395960
Nickel, Total	1121672	ND	0.00112	0.00112	mg/L	126395960
Silver, Total	1121672	ND	0.000226	0.001	mg/L	126395960
Thallium, Total	1121672	ND	0.000106	0.001	mg/L	126395960
Zinc, Total	1121672	ND	0.000875	0.001	mg/L	126395960

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Aluminum, Total	0.050	0.05	mg/L	100	90.0 - 110	126395958
Aluminum, Total	0.050	0.05	mg/L	100	90.0 - 110	126395959
Aluminum, Total	0.0501	0.05	mg/L	100	90.0 - 110	126395966
Aluminum, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126395971
Aluminum, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126396000
Aluminum, Total	0.0495	0.05	mg/L	99.0	90.0 - 110	126396005
Aluminum, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126396011
Aluminum, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126396017
Aluminum, Total	0.0499	0.05	mg/L	99.8	90.0 - 110	126396024
Aluminum, Total	0.0503	0.05	mg/L	101	90.0 - 110	126396034
Aluminum, Total	0.0541	0.05	mg/L	108	90.0 - 110	126396066
Aluminum, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126396077
Aluminum, Total	0.0503	0.05	mg/L	101	90.0 - 110	126396083
Arsenic, Total	0.0485	0.05	mg/L	97.0	90.0 - 110	126395959
Arsenic, Total	0.0478	0.05	mg/L	95.6	90.0 - 110	126395966
Arsenic, Total	0.0483	0.05	mg/L	96.6	90.0 - 110	126395971
Arsenic, Total	0.0488	0.05	mg/L	97.6	90.0 - 110	126396005
Arsenic, Total	0.0471	0.05	mg/L	94.2	90.0 - 110	126396011
Arsenic, Total	0.0463	0.05	mg/L	92.6	90.0 - 110	126396017
Barium, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126395959
Barium, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126395966
Barium, Total	0.0499	0.05	mg/L	99.8	90.0 - 110	126395971
Barium, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126396000
Barium, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126396005
Barium, Total	0.0484	0.05	mg/L	96.8	90.0 - 110	126396011
Barium, Total	0.0485	0.05	mg/L	97.0	90.0 - 110	126396017
Barium, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126396024
Beryllium, Total	0.0507	0.05	mg/L	101	90.0 - 110	126395959
Beryllium, Total	0.0502	0.05	mg/L	100	90.0 - 110	126395966
Beryllium, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126395971
Cadmium, Total	0.0504	0.05	mg/L	101	90.0 - 110	126395958
Cadmium, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126395959
Cadmium, Total	0.0495	0.05	mg/L	99.0	90.0 - 110	126395966

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SPACEX
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Space Exploration Technologies
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Parameter	Reading	Known	Units	Recover%	Limits%	File
Cadmium, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126395971
Cadmium, Total	0.048	0.05	mg/L	96.0	90.0 - 110	126396005
Cadmium, Total	0.0484	0.05	mg/L	96.8	90.0 - 110	126396011
Cadmium, Total	0.0484	0.05	mg/L	96.8	90.0 - 110	126396017
Chromium, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126395959
Chromium, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126395966
Chromium, Total	0.0487	0.05	mg/L	97.4	90.0 - 110	126395971
Chromium, Total	0.0518	0.05	mg/L	104	90.0 - 110	126395972
Chromium, Total	0.0487	0.05	mg/L	97.4	90.0 - 110	126395973
Chromium, Total	0.0474	0.05	mg/L	94.8	90.0 - 110	126395980
Chromium, Total	0.0461	0.05	mg/L	92.2	90.0 - 110	126395986
Chromium, Total	0.0467	0.05	mg/L	93.4	90.0 - 110	126395992
Chromium, Total	0.0466	0.05	mg/L	93.2	90.0 - 110	126396000
Chromium, Total	0.0468	0.05	mg/L	93.6	90.0 - 110	126396005
Chromium, Total	0.047	0.05	mg/L	94.0	90.0 - 110	126396011
Chromium, Total	0.0466	0.05	mg/L	93.2	90.0 - 110	126396017
Chromium, Total	0.0473	0.05	mg/L	94.6	90.0 - 110	126396024
Copper, Total	0.0488	0.05	mg/L	97.6	90.0 - 110	126395959
Copper, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126395966
Copper, Total	0.0487	0.05	mg/L	97.4	90.0 - 110	126395971
Copper, Total	0.0463	0.05	mg/L	92.6	90.0 - 110	126396005
Copper, Total	0.0457	0.05	mg/L	91.4	90.0 - 110	126396011
Copper, Total	0.0465	0.05	mg/L	93.0	90.0 - 110	126396017
Copper, Total	0.0476	0.05	mg/L	95.2	90.0 - 110	126396024
Copper, Total	0.047	0.05	mg/L	94.0	90.0 - 110	126396034
Copper, Total	0.0471	0.05	mg/L	94.2	90.0 - 110	126396045
Copper, Total	0.0472	0.05	mg/L	94.4	90.0 - 110	126396056
Copper, Total	0.0466	0.05	mg/L	93.2	90.0 - 110	126396066
Copper, Total	0.0467	0.05	mg/L	93.4	90.0 - 110	126396077
Copper, Total	0.047	0.05	mg/L	94.0	90.0 - 110	126396083
Copper, Total	0.0462	0.05	mg/L	92.4	90.0 - 110	126396094
Copper, Total	0.047	0.05	mg/L	94.0	90.0 - 110	126396105
Copper, Total	0.0462	0.05	mg/L	92.4	90.0 - 110	126396110
Lead, Total	0.0495	0.05	mg/L	99.0	90.0 - 110	126395959
Lead, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126395966
Lead, Total	0.0492	0.05	mg/L	98.4	90.0 - 110	126395971
Lead, Total	0.047	0.05	mg/L	94.0	90.0 - 110	126395980
Lead, Total	0.0465	0.05	mg/L	93.0	90.0 - 110	126395986
Lead, Total	0.047	0.05	mg/L	94.0	90.0 - 110	126395992
Lead, Total	0.0472	0.05	mg/L	94.4	90.0 - 110	126396000
Lead, Total	0.0471	0.05	mg/L	94.2	90.0 - 110	126396005
Lead, Total	0.0477	0.05	mg/L	95.4	90.0 - 110	126396011
Lead, Total	0.0477	0.05	mg/L	95.4	90.0 - 110	126396017
Lead, Total	0.0486	0.05	mg/L	97.2	90.0 - 110	126396024
Lead, Total	0.0492	0.05	mg/L	98.4	90.0 - 110	126396034

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<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Lead, Total	0.0492	0.05	mg/L	98.4	90.0 - 110	126396045
Lead, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126396056
Lead, Total	0.0488	0.05	mg/L	97.6	90.0 - 110	126396066
Lead, Total	0.0485	0.05	mg/L	97.0	90.0 - 110	126396077
Lead, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126396083
Lead, Total	0.0495	0.05	mg/L	99.0	90.0 - 110	126396094
Lead, Total	0.0478	0.05	mg/L	95.6	90.0 - 110	126396105
Lead, Total	0.0484	0.05	mg/L	96.8	90.0 - 110	126396110
Nickel, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126395959
Nickel, Total	0.0485	0.05	mg/L	97.0	90.0 - 110	126395966
Nickel, Total	0.0479	0.05	mg/L	95.8	90.0 - 110	126395971
Nickel, Total	0.0484	0.05	mg/L	96.8	90.0 - 110	126396005
Nickel, Total	0.0488	0.05	mg/L	97.6	90.0 - 110	126396011
Nickel, Total	0.0486	0.05	mg/L	97.2	90.0 - 110	126396017
Silver, Total	0.0542	0.05	mg/L	108	90.0 - 110	126395958
Silver, Total	0.0538	0.05	mg/L	108	90.0 - 110	126395959
Silver, Total	0.0537	0.05	mg/L	107	90.0 - 110	126395966
Silver, Total	0.0536	0.05	mg/L	107	90.0 - 110	126395971
Silver, Total	0.052	0.05	mg/L	104	90.0 - 110	126396011
Silver, Total	0.0526	0.05	mg/L	105	90.0 - 110	126396017
Silver, Total	0.0528	0.05	mg/L	106	90.0 - 110	126396066
Silver, Total	0.0523	0.05	mg/L	105	90.0 - 110	126396077
Thallium, Total	0.0499	0.05	mg/L	99.8	90.0 - 110	126395959
Thallium, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126395966
Thallium, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126395971
Thallium, Total	0.0477	0.05	mg/L	95.4	90.0 - 110	126396005
Thallium, Total	0.0481	0.05	mg/L	96.2	90.0 - 110	126396011
Thallium, Total	0.048	0.05	mg/L	96.0	90.0 - 110	126396017
Thallium, Total	0.0488	0.05	mg/L	97.6	90.0 - 110	126396024
Zinc, Total	0.0509	0.05	mg/L	102	90.0 - 110	126395959
Zinc, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126395966
Zinc, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126395971
Zinc, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126396005
Zinc, Total	0.0481	0.05	mg/L	96.2	90.0 - 110	126396011
Zinc, Total	0.0481	0.05	mg/L	96.2	90.0 - 110	126396017
Zinc, Total	0.050	0.05	mg/L	100	90.0 - 110	126396034
Zinc, Total	0.0495	0.05	mg/L	99.0	90.0 - 110	126396045
Zinc, Total	0.0502	0.05	mg/L	100	90.0 - 110	126396066
Zinc, Total	0.0482	0.05	mg/L	96.4	90.0 - 110	126396077
Zinc, Total	0.0499	0.05	mg/L	99.8	90.0 - 110	126396083

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Aluminum, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126395953
Arsenic, Total	0.050	0.05	mg/L	100	90.0 - 110	126395953

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ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Barium, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126395953
Beryllium, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126395953
Cadmium, Total	0.050	0.05	mg/L	100	90.0 - 110	126395953
Chromium, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126395953
Copper, Total	0.0501	0.05	mg/L	100	90.0 - 110	126395953
Lead, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126395953
Nickel, Total	0.0501	0.05	mg/L	100	90.0 - 110	126395953
Silver, Total	0.0542	0.05	mg/L	108	90.0 - 110	126395953
Thallium, Total	0.0501	0.05	mg/L	100	90.0 - 110	126395953
Zinc, Total	0.0508	0.05	mg/L	102	90.0 - 110	126395953

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Aluminum, Total	1121672	0.512	0.505	0.500	85.0 - 115	102	101	mg/L	1.38	20.0
Arsenic, Total	1121672	0.501	0.493	0.500	85.0 - 115	100	98.6	mg/L	1.61	20.0
Barium, Total	1121672	0.504	0.502	0.500	85.0 - 115	101	100	mg/L	0.398	20.0
Beryllium, Total	1121672	0.206	0.208	0.200	85.0 - 115	103	104	mg/L	0.966	20.0
Cadmium, Total	1121672	0.257	0.255	0.250	85.0 - 115	103	102	mg/L	0.781	20.0
Chromium, Total	1121672	0.495	0.489	0.500	85.0 - 115	99.0	97.8	mg/L	1.22	20.0
Copper, Total	1121672	0.506	0.502	0.500	85.0 - 115	101	100	mg/L	0.794	20.0
Lead, Total	1121672	0.518	0.517	0.500	85.0 - 115	104	103	mg/L	0.193	20.0
Nickel, Total	1121672	0.505	0.504	0.500	85.0 - 115	101	101	mg/L	0.198	20.0
Silver, Total	1121672	0.107	0.108	0.100	85.0 - 115	107	108	mg/L	0.930	20.0
Thallium, Total	1121672	0.518	0.516	0.500	85.0 - 115	104	103	mg/L	0.387	20.0
Zinc, Total	1121672	0.512	0.510	0.500	85.0 - 115	102	102	mg/L	0.391	20.0

LDR

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Aluminum, Total	10.4	10	mg/L	104	90.0 - 110	126395955
Arsenic, Total	9.64	10	mg/L	96.4	90.0 - 110	126395955
Barium, Total	9.52	10	mg/L	95.2	90.0 - 110	126395955
Beryllium, Total	10.3	10	mg/L	103	90.0 - 110	126395955
Cadmium, Total	9.71	10	mg/L	97.1	90.0 - 110	126395955
Chromium, Total	9.65	10	mg/L	96.5	90.0 - 110	126395955
Copper, Total	9.33	10	mg/L	93.3	90.0 - 110	126395955
Lead, Total	10.2	10	mg/L	102	90.0 - 110	126395955
Manganese, Total	9.53	10	mg/L	95.3	90.0 - 110	126395955
Nickel, Total	9.56	10	mg/L	95.6	90.0 - 110	126395955
Thallium, Total	10.2	10	mg/L	102	90.0 - 110	126395955
Zinc, Total	9.64	10	mg/L	96.4	90.0 - 110	126395955

MRL Check

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Copper, Total	0.00102	0.001	mg/L	102	25.0 - 175	126395954
Lead, Total	0.000616	0.001	mg/L	61.6	25.0 - 175	126395954

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MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Arsenic, Total	2303140	0.508	0.502	0.00457	0.500	70.0 - 130	101	99.5	mg/L	1.20	20.0
Beryllium, Total	2303140	0.212	0.209	ND	0.200	70.0 - 130	106	104	mg/L	1.43	20.0
Chromium, Total	2303140	0.488	0.500	0.00079	0.500	70.0 - 130	97.4	99.8	mg/L	2.43	20.0
Lead, Total	2303140	0.521	0.514	0.000346	0.500	70.0 - 130	104	103	mg/L	1.35	20.0
Nickel, Total	2303140	0.505	0.496	0.0021	0.500	70.0 - 130	101	98.8	mg/L	1.81	20.0
Silver, Total	2303140	0.108	0.106	ND	0.100	70.0 - 130	108	106	mg/L	1.87	20.0
Zinc, Total	2303140	0.526	0.521	0.0197	0.500	70.0 - 130	101	100	mg/L	0.992	20.0
Aluminum, Total	2303221	0.529	0.552	0.0225	0.500	70.0 - 130	101	106	mg/L	4.44	20.0
Barium, Total	2303221	0.502	0.508	0.00469	0.500	70.0 - 130	99.5	101	mg/L	1.20	20.0
Cadmium, Total	2303221	0.252	0.252	0.000148	0.250	70.0 - 130	101	101	mg/L	0	20.0
Copper, Total	2303221	0.506	0.515	0.0092	0.500	70.0 - 130	99.4	101	mg/L	1.80	20.0

Analytical Set

1122039

EPA 200.8 5.4

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Thallium, Total	2303221	0.524	0.522	0.000329	0.500	81.1 - 109	105	104	mg/L	0.383	20.0

Analytical Set

1122326

SM 5310 C-2014

AWRL/LOQ C

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon	2.15	2.00	mg/L	108	50.0 - 150	126402004

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Organic Carbon	1122326	0.136	0.0618	0.500	mg/L	126402003

CCB

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Organic Carbon	1122326	0.0999	0.0618	0.500	mg/L	126401997
Total Organic Carbon	1122326	0.154	0.0618	0.500	mg/L	126402015

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon	10.2	10.0	mg/L	102	90.0 - 110	126402000
Total Organic Carbon	10.3	10.0	mg/L	103	90.0 - 110	126402016

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon	20.3	20.0	mg/L	102	90.0 - 110	126401999

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon	10.3	10.0	mg/L	103	90.0 - 110	126402001

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File
Total Organic Carbon	1122326	5.05	5.00	mg/L	101	85.0 - 115	126402002

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MSD											
Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Total Organic Carbon	2302870	10.4	10.4	0.865	10.0	85.0 - 115	95.4	95.4	mg/L	0	20.0

Standard							
Parameter	Sample	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon		49.1	50.0	mg/L	98.2	90.0 - 110	126401998

Analytical Set 1122450

EPA 200.8 5.4

Blank						
Parameter	PrepSet	Reading	MDL	MQL	Units	File
Selenium, Total	1121672	0.000873	0.000728	0.002	mg/L	126408062

CCV						
Parameter	Reading	Known	Units	Recover%	Limits%	File
Selenium, Total	0.0501	0.05	mg/L	100	90.0 - 110	126407962
Selenium, Total	0.0503	0.05	mg/L	101	90.0 - 110	126407972
Selenium, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126407982
Selenium, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126407989
Selenium, Total	0.0501	0.05	mg/L	100	90.0 - 110	126408000
Selenium, Total	0.047	0.05	mg/L	94.0	90.0 - 110	126408005
Selenium, Total	0.0481	0.05	mg/L	96.2	90.0 - 110	126408012
Selenium, Total	0.050	0.05	mg/L	100	90.0 - 110	126408013
Selenium, Total	0.0507	0.05	mg/L	101	90.0 - 110	126408022
Selenium, Total	0.0501	0.05	mg/L	100	90.0 - 110	126408061
Selenium, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126408066
Selenium, Total	0.0516	0.05	mg/L	103	90.0 - 110	126408072

ICV						
Parameter	Reading	Known	Units	Recover%	Limits%	File
Selenium, Total	0.0502	0.05	mg/L	100	90.0 - 110	126407941

LCS Dup									
Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD
Selenium, Total	1121672	0.494	0.494	0.500	85.0 - 115	98.8	98.8	mg/L	0

MSD											
Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Selenium, Total	2303221	0.484	0.481	0.00162	0.500	70.0 - 130	96.5	95.9	mg/L	0.624	20.0

Analytical Set 1122575

SM 3500-Cr B-2011

Blank						
Parameter	PrepSet	Reading	MDL	MQL	Units	File
Hexavalent Chromium	1122575	ND	0.550	3.00	ug/L	126411861
Hexavalent Chromium	1122575	ND	0.550	3.00	ug/L	126411873

CCV						
Parameter	Reading	Known	Units	Recover%	Limits%	File
Hexavalent Chromium	85.2	80.0	ug/L	106	90.0 - 110	126411862

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CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Hexavalent Chromium	85.4	80.0	ug/L	107	90.0 - 110	126411874

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Hexavalent Chromium	1122575	85.4	86.2	80.0	85.0 - 115	107	108	ug/L	0.932	15.0

MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Hexavalent Chromium	2304236	68.6	67.6	ND	80.0	70.0 - 130	85.8	84.5	ug/L	1.47	20.0

Analytical Set

1123260

EPA 200.8 5.4

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Antimony, Total	1121672	ND	0.000847	0.003	mg/L	126429301

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Antimony, Total	0.0525	0.05	mg/L	105	90.0 - 110	126429267
Antimony, Total	0.0537	0.05	mg/L	107	90.0 - 110	126429277
Antimony, Total	0.0533	0.05	mg/L	107	90.0 - 110	126429287
Antimony, Total	0.053	0.05	mg/L	106	90.0 - 110	126429295
Antimony, Total	0.0539	0.05	mg/L	108	90.0 - 110	126429305
Antimony, Total	0.0549	0.05	mg/L	110	90.0 - 110	126429311
Antimony, Total	0.0549	0.05	mg/L	110	90.0 - 110	126429321
Antimony, Total	0.0541	0.05	mg/L	108	90.0 - 110	126429331

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Antimony, Total	0.050	0.05	mg/L	100	90.0 - 110	126429237

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Antimony, Total	1121672	0.516	0.514	0.500	85.0 - 115	103	103	mg/L	0.388	20.0

MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Antimony, Total	2303221	0.511	0.517	ND	0.500	70.0 - 130	102	103	mg/L	1.17	20.0

Analytical Set

1123498

EPA 200.7 4.4

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Calcium	1121672	ND	0.0156	0.500	mg/L	126434927
Iron, Total	1121672	ND	0.00379	0.025	mg/L	126434927

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Calcium	25.3	25.0	mg/L	101	90.0 - 110	126434920

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SPAC-R

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Calcium	25.1	25.0	mg/L	100	90.0 - 110	126434930
Calcium	24.9	25.0	mg/L	99.6	90.0 - 110	126434936
Iron, Total	2.48	2.50	mg/L	99.2	90.0 - 110	126434920
Iron, Total	2.46	2.50	mg/L	98.4	90.0 - 110	126434930
Iron, Total	2.45	2.50	mg/L	98.0	90.0 - 110	126434936

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	File
Calcium	49.7	50.0	mg/L	99.4	95.0 - 105	126434914
Iron, Total	4.77	5.00	mg/L	95.4	95.0 - 105	126434914

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Calcium	24.8	25.0	mg/L	99.2	90.0 - 110	126434918
Iron, Total	2.46	2.50	mg/L	98.4	90.0 - 110	126434918

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Calcium	1121672	4.91	4.89	5.00	85.0 - 115	98.2	97.8	mg/L	0.408	25.0
Iron, Total	1121672	0.498	0.497	0.500	85.0 - 115	99.6	99.4	mg/L	0.201	25.0

MRL Check

Parameter	Reading	Known	Units	Recover%	Limits%	File
Calcium	0.521	0.500	mg/L	104	25.0 - 175	126434919
Iron, Total	0.0538	0.050	mg/L	108	25.0 - 175	126434919

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Calcium	2303221	6.42	6.55	1.56	5.00	75.0 - 125	97.2	99.8	mg/L	2.64	25.0
Iron, Total	2303221	0.560	0.563	0.080	0.500	75.0 - 125	96.0	96.6	mg/L	0.623	25.0

Analytical Set

1123699

EPA 200.8 5.4

Blank

Parameter	PrepSet	Reading	MDL	MDL	Units	File
Manganese, Total	1121672	ND	0.000168	0.001	mg/L	126440088

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Manganese, Total	0.0529	0.05	mg/L	106	90.0 - 110	126440082
Manganese, Total	0.052	0.05	mg/L	104	90.0 - 110	126440092
Manganese, Total	0.0495	0.05	mg/L	99.0	90.0 - 110	126440119
Manganese, Total	0.050	0.05	mg/L	100	90.0 - 110	126440128
Manganese, Total	0.0535	0.05	mg/L	107	90.0 - 110	126440204
Manganese, Total	0.0508	0.05	mg/L	102	90.0 - 110	126440235
Manganese, Total	0.0516	0.05	mg/L	103	90.0 - 110	126440243
Manganese, Total	0.0538	0.05	mg/L	108	90.0 - 110	126440254

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ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Manganese, Total	0.0544	0.05	mg/L	109	90.0 - 110	126440073

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Manganese, Total	1121672	0.510	0.512	0.500	85.0 - 115	102	102	mg/L	0.391	20.0

MRL Check

Parameter	Reading	Known	Units	Recover%	Limits%	File
Manganese, Total	0.00104	0.001	mg/L	104	25.0 - 175	126440074

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Manganese, Total	2303221	0.504	0.501	0.00211	0.500	70.0 - 130	100	99.8	mg/L	0.600	20.0

Analytical Set

1121678

EPA 624.1

BFB

Parameter	Sample	RefMass	Reading	%	Limits%	File
BFB Mass 173	1121678	174	10	1.5	0 - 2.00	126387047
BFB Mass 174	1121678	95.0	676	60.4	50.0 - 100	126387047
BFB Mass 175	1121678	174	50	7.4	5.00 - 9.00	126387047
BFB Mass 176	1121678	174	648	95.9	95.0 - 101	126387047
BFB Mass 177	1121678	176	44	6.8	5.00 - 9.00	126387047
BFB Mass 50	1121678	95.0	225	20.1	15.0 - 40.0	126387047
BFB Mass 75	1121678	95.0	557	49.8	30.0 - 60.0	126387047
BFB Mass 95	1121678	95.0	1118	100.0	100 - 100	126387047
BFB Mass 96	1121678	95.0	73	6.5	5.00 - 9.00	126387047

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Acrolein	1121678	ND	2.33	4.00	ug/L	126387051
Acrylonitrile	1121678	ND	0.998	1.00	ug/L	126387051

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	1121678	LCS	170700	179900	89970	269900	126387049	1121678
1,4-DichlorobenzeneD4 (ISTD)	1121678	LCS Dup	168300	179900	89970	269900	126387050	1121678
1,4-DichlorobenzeneD4 (ISTD)	1121678	Blank	143200	179900	89970	269900	126387051	1121678
ChlorobenzeneD5 (ISTD)	1121678	LCS	373700	398400	199200	597600	126387049	1121678
ChlorobenzeneD5 (ISTD)	1121678	LCS Dup	381600	398400	199200	597600	126387050	1121678
ChlorobenzeneD5 (ISTD)	1121678	Blank	337200	398400	199200	597600	126387051	1121678
1,4-DichlorobenzeneD4 (ISTD)	2301862	MS	198000	179900	89970	269900	126387053	1121678
1,4-DichlorobenzeneD4 (ISTD)	2301862	MSD	189800	179900	89970	269900	126387054	1121678
ChlorobenzeneD5 (ISTD)	2301862	MS	393500	398400	199200	597600	126387053	1121678
ChlorobenzeneD5 (ISTD)	2301862	MSD	420500	398400	199200	597600	126387054	1121678
1,4-DichlorobenzeneD4 (ISTD)	2302895	Unknown	174400	179900	89970	269900	126387055	1121678
ChlorobenzeneD5 (ISTD)	2302895	Unknown	396500	398400	199200	597600	126387055	1121678

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IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	1121678	LCS	11.97	11.97	11.91	12.03	126387049	1121678
1,4-DichlorobenzeneD4 (ISTD)	1121678	LCS Dup	11.97	11.97	11.91	12.03	126387050	1121678
1,4-DichlorobenzeneD4 (ISTD)	1121678	Blank	11.97	11.97	11.91	12.03	126387051	1121678
ChlorobenzeneD5 (ISTD)	1121678	LCS	9.597	9.597	9.537	9.657	126387049	1121678
ChlorobenzeneD5 (ISTD)	1121678	LCS Dup	9.597	9.597	9.537	9.657	126387050	1121678
ChlorobenzeneD5 (ISTD)	1121678	Blank	9.597	9.597	9.537	9.657	126387051	1121678
1,4-DichlorobenzeneD4 (ISTD)	2301862	MS	11.98	11.97	11.91	12.03	126387053	1121678
1,4-DichlorobenzeneD4 (ISTD)	2301862	MSD	11.98	11.97	11.91	12.03	126387054	1121678
ChlorobenzeneD5 (ISTD)	2301862	MS	9.597	9.597	9.537	9.657	126387053	1121678
ChlorobenzeneD5 (ISTD)	2301862	MSD	9.597	9.597	9.537	9.657	126387054	1121678
1,4-DichlorobenzeneD4 (ISTD)	2302895	Unknown	11.97	11.97	11.91	12.03	126387055	1121678
ChlorobenzeneD5 (ISTD)	2302895	Unknown	9.597	9.597	9.537	9.657	126387055	1121678

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Acrolein	1121678	58.0	55.0	40.0	60.0 - 140	145 *	138	ug/L	4.95	30.0
Acrylonitrile	1121678	34.4	33.8	40.0	60.0 - 140	86.0	84.5	ug/L	1.76	30.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Acrolein	2301862	17.9	34.6	ND	400	40.0 - 160	4.48 *	8.65 *	ug/L	63.6 *	60.0
Acrylonitrile	2301862	19.8	3.00	ND	400	40.0 - 160	4.95 *	0.750 *	ug/L	147 *	60.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
1,2-DCA-d4 (SURR)	1121678	LCS	19.8	20.0	ug/L	99.0	70.0 - 130	126387049
1,2-DCA-d4 (SURR)	1121678	LCS Dup	19.5	20.0	ug/L	97.5	70.0 - 130	126387050
1,2-DCA-d4 (SURR)	1121678	Blank	20.6	20.0	ug/L	103	70.0 - 130	126387051
Bromofluorobenzene (SURR)	1121678	LCS	20.0	20.0	ug/L	100	70.0 - 130	126387049
Bromofluorobenzene (SURR)	1121678	LCS Dup	20.2	20.0	ug/L	101	70.0 - 130	126387050
Bromofluorobenzene (SURR)	1121678	Blank	21.1	20.0	ug/L	106	70.0 - 130	126387051
Dibromofluoromethane (SURR)	1121678	LCS	20.0	20.0	ug/L	100	70.0 - 130	126387049
Dibromofluoromethane (SURR)	1121678	LCS Dup	20.1	20.0	ug/L	100	70.0 - 130	126387050
Dibromofluoromethane (SURR)	1121678	Blank	19.8	20.0	ug/L	99.0	70.0 - 130	126387051
TolueneD8 (SURR)	1121678	LCS	20.1	20.0	ug/L	100	70.0 - 130	126387049
TolueneD8 (SURR)	1121678	LCS Dup	19.7	20.0	ug/L	98.5	70.0 - 130	126387050
TolueneD8 (SURR)	1121678	Blank	20.0	20.0	ug/L	100	70.0 - 130	126387051
1,2-DCA-d4 (SURR)	2301862	MS	19.5	20.0	ug/L	97.5	70.0 - 130	126387053
1,2-DCA-d4 (SURR)	2301862	MSD	19.3	20.0	ug/L	96.5	70.0 - 130	126387054
Bromofluorobenzene (SURR)	2301862	MS	19.8	20.0	ug/L	99.0	70.0 - 130	126387053
Bromofluorobenzene (SURR)	2301862	MSD	20.7	20.0	ug/L	104	70.0 - 130	126387054
Dibromofluoromethane (SURR)	2301862	MS	18.8	20.0	ug/L	94.0	70.0 - 130	126387053
Dibromofluoromethane (SURR)	2301862	MSD	17.8	20.0	ug/L	89.0	70.0 - 130	126387054
TolueneD8 (SURR)	2301862	MS	20.9	20.0	ug/L	104	70.0 - 130	126387053
TolueneD8 (SURR)	2301862	MSD	20.7	20.0	ug/L	104	70.0 - 130	126387054
1,2-DCA-d4 (SURR)	2302895	Unknown	19.8	20.0	ug/L	99.0	70.0 - 130	126387055

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SPAC-R

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	Surrogate							
<u>Parameter</u>	<u>Sample</u>	<u>Type</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Bromofluorobenzene (SURR)	2302895	Unknown	20.3	20.0	ug/L	102	70.0 - 130	126387055
Dibromofluoromethane (SURR)	2302895	Unknown	20.1	20.0	ug/L	100	70.0 - 130	126387055
TolueneD8 (SURR)	2302895	Unknown	20.2	20.0	ug/L	101	70.0 - 130	126387055

Analytical Set

1121680

EPA 624.1

BFB							
<u>Parameter</u>	<u>Sample</u>	<u>RefMass</u>	<u>Reading</u>	<u>%</u>	<u>Limits%</u>	<u>File</u>	
BFB Mass 173	1121680	174	10	1.5	0 - 2.00	126387066	
BFB Mass 174	1121680	95.0	676	60.4	50.0 - 100	126387066	
BFB Mass 175	1121680	174	50	7.4	5.00 - 9.00	126387066	
BFB Mass 176	1121680	174	648	95.9	95.0 - 101	126387066	
BFB Mass 177	1121680	176	44	6.8	5.00 - 9.00	126387066	
BFB Mass 50	1121680	95.0	225	20.1	15.0 - 40.0	126387066	
BFB Mass 75	1121680	95.0	557	49.8	30.0 - 60.0	126387066	
BFB Mass 95	1121680	95.0	1118	100.0	100 - 100	126387066	
BFB Mass 96	1121680	95.0	73	6.5	5.00 - 9.00	126387066	

Blank							
<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>	
1,1,1-Trichloroethane	1121680	ND	0.531	1.00	ug/L	126387070	
1,1,2-Trichloroethane	1121680	ND	0.563	1.00	ug/L	126387070	
1,1-Dichloroethane	1121680	ND	0.593	1.00	ug/L	126387070	
1,1-Dichloroethylene	1121680	ND	0.574	1.00	ug/L	126387070	
1,2-Dibromoethane (EDB)	1121680	ND	0.562	1.00	ug/L	126387070	
1,2-Dichloroethane	1121680	ND	0.590	1.00	ug/L	126387070	
1,2-Dichloropropane	1121680	ND	0.615	1.00	ug/L	126387070	
Benzene	1121680	ND	0.453	1.00	ug/L	126387070	
Bromodichloromethane	1121680	ND	0.409	1.00	ug/L	126387070	
Bromoform	1121680	ND	0.500	1.00	ug/L	126387070	
Carbon Tetrachloride	1121680	ND	0.299	1.00	ug/L	126387070	
Chlorobenzene	1121680	ND	0.558	1.00	ug/L	126387070	
Chloroethane	1121680	ND	1.12	1.12	ug/L	126387070	
Chloroform	1121680	ND	0.463	1.00	ug/L	126387070	
Chloromethane (Methyl Chloride)	1121680	ND	0.811	1.00	ug/L	126387070	
cis-1,3-Dichloropropene	1121680	ND	0.660	1.00	ug/L	126387070	
Dibromochloromethane	1121680	ND	0.311	1.00	ug/L	126387070	
Dichloromethane	1121680	ND	1.02	1.02	ug/L	126387070	
Ethylbenzene	1121680	ND	0.498	1.00	ug/L	126387070	
m-Dichlorobenzene (1,3-DCB)	1121680	ND	0.619	1.00	ug/L	126387070	
Methyl ethyl ketone (Butanone)	1121680	ND	0.742	1.00	ug/L	126387070	
o-Dichlorobenzene (1,2-DCB)	1121680	0.620	0.532	1.00	ug/L	126387070	
p-Dichlorobenzene (1,4-DCB)	1121680	ND	0.837	1.00	ug/L	126387070	
Tetrachloroethylene	1121680	ND	0.607	1.00	ug/L	126387070	
Toluene	1121680	ND	0.655	1.00	ug/L	126387070	
trans-1,2-Dichloroethylene	1121680	ND	0.701	1.00	ug/L	126387070	

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Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
trans-1,3-Dichloropropene	1121680	ND	0.627	1.00	ug/L	126387070
Trichloroethylene	1121680	ND	0.521	1.00	ug/L	126387070
Vinyl chloride	1121680	ND	0.702	1.00	ug/L	126387070

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	1121680	LCS	170700	179900	89970	269900	126387068	1121680
1,4-DichlorobenzeneD4 (ISTD)	1121680	LCS Dup	168300	179900	89970	269900	126387069	1121680
1,4-DichlorobenzeneD4 (ISTD)	1121680	Blank	143200	179900	89970	269900	126387070	1121680
ChlorobenzeneD5 (ISTD)	1121680	LCS	373700	398400	199200	597600	126387068	1121680
ChlorobenzeneD5 (ISTD)	1121680	LCS Dup	381600	398400	199200	597600	126387069	1121680
ChlorobenzeneD5 (ISTD)	1121680	Blank	337200	398400	199200	597600	126387070	1121680
1,4-DichlorobenzeneD4 (ISTD)	2301862	MS	198000	179900	89970	269900	126387072	1121680
1,4-DichlorobenzeneD4 (ISTD)	2301862	MSD	189800	179900	89970	269900	126387073	1121680
ChlorobenzeneD5 (ISTD)	2301862	MS	393500	398400	199200	597600	126387072	1121680
ChlorobenzeneD5 (ISTD)	2301862	MSD	420500	398400	199200	597600	126387073	1121680
1,4-DichlorobenzeneD4 (ISTD)	2302895	Unknown	192300	179900	89970	269900	126387074	1121680
ChlorobenzeneD5 (ISTD)	2302895	Unknown	439200	398400	199200	597600	126387074	1121680

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	1121680	LCS	11.97	11.97	11.91	12.03	126387068	1121680
1,4-DichlorobenzeneD4 (ISTD)	1121680	LCS Dup	11.97	11.97	11.91	12.03	126387069	1121680
1,4-DichlorobenzeneD4 (ISTD)	1121680	Blank	11.97	11.97	11.91	12.03	126387070	1121680
ChlorobenzeneD5 (ISTD)	1121680	LCS	9.597	9.597	9.537	9.657	126387068	1121680
ChlorobenzeneD5 (ISTD)	1121680	LCS Dup	9.597	9.597	9.537	9.657	126387069	1121680
ChlorobenzeneD5 (ISTD)	1121680	Blank	9.597	9.597	9.537	9.657	126387070	1121680
1,4-DichlorobenzeneD4 (ISTD)	2301862	MS	11.98	11.97	11.91	12.03	126387072	1121680
1,4-DichlorobenzeneD4 (ISTD)	2301862	MSD	11.98	11.97	11.91	12.03	126387073	1121680
ChlorobenzeneD5 (ISTD)	2301862	MS	9.597	9.597	9.537	9.657	126387072	1121680
ChlorobenzeneD5 (ISTD)	2301862	MSD	9.597	9.597	9.537	9.657	126387073	1121680
1,4-DichlorobenzeneD4 (ISTD)	2302895	Unknown	11.97	11.97	11.91	12.03	126387074	1121680
ChlorobenzeneD5 (ISTD)	2302895	Unknown	9.597	9.597	9.537	9.657	126387074	1121680

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,1,1-Trichloroethane	1121680	17.0	16.2	20.0	70.0 - 130	85.0	81.0	ug/L	4.82	21.0
1,1,2,2-Tetrachloroethane	1121680	18.3	17.9	20.0	60.0 - 140	91.5	89.5	ug/L	2.21	36.0
1,1,2-Trichloroethane	1121680	18.2	17.6	20.0	70.0 - 130	91.0	88.0	ug/L	3.35	27.0
1,1-Dichloroethane	1121680	17.6	16.6	20.0	70.0 - 130	88.0	83.0	ug/L	5.85	24.0
1,1-Dichloroethylene	1121680	17.1	16.2	20.0	50.0 - 150	85.5	81.0	ug/L	5.41	40.0
1,2-Dibromoethane (EDB)	1121680	18.4	17.5	20.0	78.4 - 122	92.0	87.5	ug/L	5.01	30.0
1,2-Dichloroethane	1121680	17.9	17.2	20.0	70.0 - 130	89.5	86.0	ug/L	3.99	29.0
1,2-Dichloropropane	1121680	18.0	17.2	20.0	35.0 - 165	90.0	86.0	ug/L	4.55	69.0
Benzene	1121680	17.1	16.4	20.0	65.0 - 135	85.5	82.0	ug/L	4.18	33.0
Bromodichloromethane	1121680	18.2	17.2	20.0	65.0 - 135	91.0	86.0	ug/L	5.65	34.0

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LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Bromoform	1121680	17.4	17.0	20.0	70.0 - 130	87.0	85.0	ug/L	2.33	25.0
Bromomethane (Methyl Bromi	1121680	13.7	13.8	20.0	15.0 - 185	68.5	69.0	ug/L	0.727	90.0
Carbon Tetrachloride	1121680	17.6	16.9	20.0	70.0 - 130	88.0	84.5	ug/L	4.06	26.0
Chlorobenzene	1121680	18.0	17.2	20.0	65.0 - 135	90.0	86.0	ug/L	4.55	29.0
Chloroethane	1121680	15.2	15.0	20.0	40.0 - 160	76.0	75.0	ug/L	1.32	47.0
Chloroform	1121680	17.6	16.3	20.0	70.0 - 135	88.0	81.5	ug/L	7.67	32.0
Chloromethane (Methyl Chloride)	1121680	12.7	12.1	20.0	0.100 - 205	63.5	60.5	ug/L	4.84	472
cis-1,3-Dichloropropene	1121680	16.8	16.1	20.0	25.0 - 175	84.0	80.5	ug/L	4.26	79.0
Dibromochloromethane	1121680	18.5	17.6	20.0	70.0 - 135	92.5	88.0	ug/L	4.99	30.0
Dichloromethane	1121680	16.9	16.1	20.0	60.0 - 140	84.5	80.5	ug/L	4.85	192
Ethylbenzene	1121680	19.1	18.2	20.0	60.0 - 140	95.5	91.0	ug/L	4.83	34.0
m-Dichlorobenzene (1,3-DCB)	1121680	20.0	20.2	20.0	70.0 - 130	100	101	ug/L	0.995	24.0
Methyl ethyl ketone (Butanone)	1121680	18.6	16.8	20.0	62.3 - 136	93.0	84.0	ug/L	10.2	30.0
o-Dichlorobenzene (1,2-DCB)	1121680	18.9	18.4	20.0	65.0 - 135	94.5	92.0	ug/L	2.68	31.0
p-Dichlorobenzene (1,4-DCB)	1121680	18.7	18.7	20.0	65.0 - 135	93.5	93.5	ug/L	0	31.0
Tetrachloroethylene	1121680	19.0	18.4	20.0	70.0 - 130	95.0	92.0	ug/L	3.21	23.0
Toluene	1121680	17.3	16.5	20.0	70.0 - 130	86.5	82.5	ug/L	4.73	22.0
trans-1,2-Dichloroethylene	1121680	16.5	15.7	20.0	70.0 - 130	82.5	78.5	ug/L	4.97	27.0
trans-1,3-Dichloropropene	1121680	17.6	16.5	20.0	50.0 - 150	88.0	82.5	ug/L	6.45	52.0
Trichloroethylene	1121680	17.0	16.3	20.0	65.0 - 135	85.0	81.5	ug/L	4.20	29.0
Vinyl chloride	1121680	14.1	13.5	20.0	5.00 - 195	70.5	67.5	ug/L	4.35	100

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
1,1,1-Trichloroethane	2301862	169	162	ND	200	52.0 - 162	84.5	81.0	ug/L	4.23	36.0
1,1,2,2-Tetrachloroethane	2301862	0	3.90	ND	200	70.0 - 130	*	1.95 *	ug/L		30.0
1,1,2-Trichloroethane	2301862	174	169	ND	200	52.0 - 150	87.0	84.5	ug/L	2.92	45.0
1,1-Dichloroethane	2301862	194	181	ND	200	59.0 - 155	97.0	90.5	ug/L	6.93	40.0
1,1-Dichloroethylene	2301862	182	173	ND	200	0.100 - 234	91.0	86.5	ug/L	5.07	32.0
1,2-Dibromoethane (EDB)	2301862	176	175	ND	200	49.3 - 120	88.0	87.5	ug/L	0.570	30.0
1,2-Dichloroethane	2301862	171	162	ND	200	49.0 - 155	85.5	81.0	ug/L	5.41	49.0
1,2-Dichloropropane	2301862	182	179	ND	200	0.100 - 210	91.0	89.5	ug/L	1.66	55.0
Benzene	2301862	183	171	ND	200	37.0 - 151	91.5	85.5	ug/L	6.78	61.0
Bromodichloromethane	2301862	166	163	ND	200	35.0 - 155	83.0	81.5	ug/L	1.82	56.0
Bromoform	2301862	87.1	91.9	ND	200	45.0 - 169	43.6 *	46.0	ug/L	5.36	42.0
Bromomethane (Methyl Bromi	2301862	117	113	ND	200	0.100 - 242	58.5	56.5	ug/L	3.48	61.0
Carbon Tetrachloride	2301862	161	147	ND	200	70.0 - 140	80.5	73.5	ug/L	9.09	41.0
Chlorobenzene	2301862	184	181	ND	200	37.0 - 160	92.0	90.5	ug/L	1.64	53.0
Chloroethane	2301862	160	150	ND	200	14.0 - 230	80.0	75.0	ug/L	6.45	78.0
Chloroform	2301862	184	168	ND	200	51.0 - 138	92.0	84.0	ug/L	9.09	54.0
Chloromethane (Methyl Chloride)	2301862	135	132	ND	200	0.100 - 273	67.5	66.0	ug/L	2.25	60.0
cis-1,3-Dichloropropene	2301862	168	165	ND	200	0.100 - 227	84.0	82.5	ug/L	1.80	58.0
Dibromochloromethane	2301862	161	160	ND	200	53.0 - 149	80.5	80.0	ug/L	0.623	50.0
Dichloromethane	2301862	170	164	ND	200	0.100 - 221	85.0	82.0	ug/L	3.59	28.0
Ethylbenzene	2301862	203	200	ND	200	37.0 - 162	102	100	ug/L	1.49	63.0

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MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
m-Dichlorobenzene (1,3-DCB)	2301862	216	227	ND	200	59.0 - 156	108	114	ug/L	4.97	43.0
Methyl ethyl ketone (Butanone)	2301862	0	0	ND	200	0.100 - 211	0 *	0 *	ug/L		30.0
o-Dichlorobenzene (1,2-DCB)	2301862	177	185	ND	200	18.0 - 190	88.5	92.5	ug/L	4.42	57.0
p-Dichlorobenzene (1,4-DCB)	2301862	191	217	ND	200	18.0 - 190	95.5	108	ug/L	12.7	57.0
Tetrachloroethylene	2301862	206	205	ND	200	64.0 - 148	103	102	ug/L	0.487	39.0
Toluene	2301862	182	176	ND	200	47.0 - 150	91.0	88.0	ug/L	3.35	41.0
trans-1,2-Dichloroethylene	2301862	166	154	ND	200	54.0 - 156	83.0	77.0	ug/L	7.50	45.0
trans-1,3-Dichloropropene	2301862	172	173	ND	200	17.0 - 183	86.0	86.5	ug/L	0.580	86.0
Trichloroethylene	2301862	348	342	ND	200	70.0 - 157	174 *	171 *	ug/L	1.74	48.0
Vinyl chloride	2301862	144	137	ND	200	0.100 - 251	72.0	68.5	ug/L	4.98	66.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
1,2-DCA-d4 (SURR)	1121680	LCS	19.8	20.0	ug/L	99.0	70.0 - 130	126387068
1,2-DCA-d4 (SURR)	1121680	LCS Dup	19.5	20.0	ug/L	97.5	70.0 - 130	126387069
1,2-DCA-d4 (SURR)	1121680	Blank	20.6	20.0	ug/L	103	70.0 - 130	126387070
Bromofluorobenzene (SURR)	1121680	LCS	20.0	20.0	ug/L	100	70.0 - 130	126387068
Bromofluorobenzene (SURR)	1121680	LCS Dup	20.2	20.0	ug/L	101	70.0 - 130	126387069
Bromofluorobenzene (SURR)	1121680	Blank	21.1	20.0	ug/L	106	70.0 - 130	126387070
Dibromofluoromethane (SURR)	1121680	LCS	20.0	20.0	ug/L	100	70.0 - 130	126387068
Dibromofluoromethane (SURR)	1121680	LCS Dup	20.1	20.0	ug/L	100	70.0 - 130	126387069
Dibromofluoromethane (SURR)	1121680	Blank	19.8	20.0	ug/L	99.0	70.0 - 130	126387070
TolueneD8 (SURR)	1121680	LCS	20.1	20.0	ug/L	100	70.0 - 130	126387068
TolueneD8 (SURR)	1121680	LCS Dup	19.7	20.0	ug/L	98.5	70.0 - 130	126387069
TolueneD8 (SURR)	1121680	Blank	20.0	20.0	ug/L	100	70.0 - 130	126387070
1,2-DCA-d4 (SURR)	2301862	MS	19.5	20.0	ug/L	97.5	70.0 - 130	126387072
1,2-DCA-d4 (SURR)	2301862	MSD	19.3	20.0	ug/L	96.5	70.0 - 130	126387073
Bromofluorobenzene (SURR)	2301862	MS	19.8	20.0	ug/L	99.0	70.0 - 130	126387072
Bromofluorobenzene (SURR)	2301862	MSD	20.7	20.0	ug/L	104	70.0 - 130	126387073
Dibromofluoromethane (SURR)	2301862	MS	18.8	20.0	ug/L	94.0	70.0 - 130	126387072
Dibromofluoromethane (SURR)	2301862	MSD	17.8	20.0	ug/L	89.0	70.0 - 130	126387073
TolueneD8 (SURR)	2301862	MS	20.9	20.0	ug/L	104	70.0 - 130	126387072
TolueneD8 (SURR)	2301862	MSD	20.7	20.0	ug/L	104	70.0 - 130	126387073
1,2-DCA-d4 (SURR)	2302895	Unknown	20.5	20.0	ug/L	102	70.0 - 130	126387074
Bromofluorobenzene (SURR)	2302895	Unknown	20.6	20.0	ug/L	103	70.0 - 130	126387074
Dibromofluoromethane (SURR)	2302895	Unknown	20.2	20.0	ug/L	101	70.0 - 130	126387074
TolueneD8 (SURR)	2302895	Unknown	20.2	20.0	ug/L	101	70.0 - 130	126387074

Analytical Set

1122623

EPA 608.3

Blank

Parameter	PrepSet	Reading	MDL	MDL	Units	File
PCB-1016	1121972	ND	0.202	0.202	ug/L	126412989
PCB-1221	1121972	ND	0.143	0.200	ug/L	126412989
PCB-1232	1121972	ND	0.143	0.200	ug/L	126412989
PCB-1242	1121972	ND	0.192	0.200	ug/L	126412989

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Parameter	PrepSet	Reading	MDL	MQL	Units	File
PCB-1248	1121972	ND	0.143	0.200	ug/L	126412989
PCB-1254	1121972	ND	0.143	0.200	ug/L	126412989
PCB-1260	1121972	ND	0.161	0.200	ug/L	126412989
PCB-1262	1121972	ND	0.198	0.200	ug/L	126412989
PCB-1268	1121972	ND	0.143	0.200	ug/L	126412989

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
PCB-1016	968	1000	ug/L	96.8	80.0 - 115	126412978
PCB-1016	1140	1000	ug/L	114	80.0 - 115	126412988
PCB-1016	1170	1000	ug/L	117	80.0 - 115 *	126412997
PCB-1016	1170	1000	ug/L	117	80.0 - 115 *	126412998
PCB-1260	853	1000	ug/L	85.3	80.0 - 115	126412978
PCB-1260	939	1000	ug/L	93.9	80.0 - 115	126412988
PCB-1260	1010	1000	ug/L	101	80.0 - 115	126412997
PCB-1260	987	1000	ug/L	98.7	80.0 - 115	126412998

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
PCB-1016	1121972	941	859	1000	39.8 - 135	94.1	85.9	ug/L	9.11	30.0
PCB-1260	1121972	728	711	1000	36.1 - 134	72.8	71.1	ug/L	2.36	30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
Decachlorobiphenyl	1121972	Blank	55.6	100	ug/L	55.6	10.0 - 200	126412989
Tetrachloro-m-Xylene (Surr)	1121972	Blank	46.2	100	ug/L	46.2	10.0 - 200	126412989
Decachlorobiphenyl	2302895	Unknown	1.26	1.65	ug/L	76.4	10.0 - 200	126412995
Tetrachloro-m-Xylene (Surr)	2302895	Unknown	0.697	1.65	ug/L	42.2	10.0 - 200	126412995

Analytical Set

1122871

ASTM D7065-11

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Nonylphenol	1122298	ND	5.00	30.0	ug/L	126419398

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Nonylphenol	293000	300000	ug/L	97.5	70.0 - 130	126419397
Nonylphenol	299000	300000	ug/L	99.7	70.0 - 130	126419405

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
Acenaphthene-d10-ISTD	624841	CCV	760100	760100	380100	1140000	126419397	624841
Acenaphthene-d10-ISTD	624841	CCV	706900	760100	380100	1140000	126419405	624841
Phenanthrene-d10-ISTD	624841	CCV	981000	981000	490500	1471000	126419397	624841
Phenanthrene-d10-ISTD	624841	CCV	925500	981000	490500	1471000	126419405	624841
Acenaphthene-d10-ISTD	1122298	Blank	681400	760100	380100	1140000	126419398	1122298

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IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
Acenaphthene-d10-ISTD	1122298	LCS	663100	760100	380100	1140000	126419399	1122298
Acenaphthene-d10-ISTD	1122298	LCS Dup	581500	760100	380100	1140000	126419400	1122298
Phenanthrene-d10-ISTD	1122298	Blank	930700	981000	490500	1471000	126419398	1122298
Phenanthrene-d10-ISTD	1122298	LCS	890000	981000	490500	1471000	126419399	1122298
Phenanthrene-d10-ISTD	1122298	LCS Dup	773800	981000	490500	1471000	126419400	1122298
Acenaphthene-d10-ISTD	2302895	Unknown	536500	760100	380100	1140000	126419403	1122298
Phenanthrene-d10-ISTD	2302895	Unknown	747500	981000	490500	1471000	126419403	1122298

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
Acenaphthene-d10-ISTD	624841	CCV	7.294	7.294	7.234	7.354	126419397	624841
Acenaphthene-d10-ISTD	624841	CCV	7.294	7.294	7.234	7.354	126419405	624841
Phenanthrene-d10-ISTD	624841	CCV	8.538	8.538	8.478	8.598	126419397	624841
Phenanthrene-d10-ISTD	624841	CCV	8.538	8.538	8.478	8.598	126419405	624841
Acenaphthene-d10-ISTD	1122298	Blank	7.294	7.294	7.234	7.354	126419398	1122298
Acenaphthene-d10-ISTD	1122298	LCS	7.300	7.294	7.234	7.354	126419399	1122298
Acenaphthene-d10-ISTD	1122298	LCS Dup	7.300	7.294	7.234	7.354	126419400	1122298
Phenanthrene-d10-ISTD	1122298	Blank	8.532	8.538	8.478	8.598	126419398	1122298
Phenanthrene-d10-ISTD	1122298	LCS	8.538	8.538	8.478	8.598	126419399	1122298
Phenanthrene-d10-ISTD	1122298	LCS Dup	8.538	8.538	8.478	8.598	126419400	1122298
Acenaphthene-d10-ISTD	2302895	Unknown	7.294	7.294	7.234	7.354	126419403	1122298
Phenanthrene-d10-ISTD	2302895	Unknown	8.532	8.538	8.478	8.598	126419403	1122298

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Nonylphenol	1122298	124	127	150	56.0 - 112	82.7	84.7	ug/L	2.39	30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
4-Nonylphenol-SURR	624841	CCV	49000	50000	ug/L	98.0	50.0 - 130	126419397
4-Nonylphenol-SURR	624841	CCV	50600	50000	ug/L	101	50.0 - 130	126419405
4-Nonylphenol-SURR	1122298	Blank	21600	25000	ug/L	86.4	50.0 - 130	126419398
4-Nonylphenol-SURR	1122298	LCS	22400	25000	ug/L	89.6	50.0 - 130	126419399
4-Nonylphenol-SURR	1122298	LCS Dup	23800	25000	ug/L	95.2	50.0 - 130	126419400
4-Nonylphenol-SURR	2302895	Unknown	24.8	28.0	ug/L	88.6	50.0 - 130	126419403

Analytical Set

1124511

EPA 625.1

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
1,2,4,5-Tetrachlorobenzene	1121954	ND	1.03	1.03	ug/L	126461237
1,2,4-Trichlorobenzene	1121954	ND	0.941	1.00	ug/L	126461237
1,2-Dichlorobenzene	1121954	ND	1.04	5.00	ug/L	126461237
1,2-DPH (as azobenzene)	1121954	ND	0.238	1.00	ug/L	126461237
1,3-Dichlorobenzene	1121954	ND	0.954	5.00	ug/L	126461237
1,4-Dichlorobenzene	1121954	ND	1.01	5.00	ug/L	126461237
2,4,5-Trichlorophenol	1121954	ND	0.961	5.00	ug/L	126461237

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Parameter	PrepSet	Reading	MDL	MQL	Units	File
2,4,6-Trichlorophenol	1121954	ND	1.24	2.00	ug/L	126461237
2,4-Dichlorophenol	1121954	ND	0.222	1.00	ug/L	126461237
2,4-Dimethylphenol	1121954	ND	0.536	1.00	ug/L	126461237
2,4-Dinitrophenol	1121954	ND	1.34	2.00	ug/L	126461237
2,4-Dinitrotoluene	1121954	ND	1.35	2.00	ug/L	126461237
2,6-Dinitrotoluene	1121954	ND	1.29	2.00	ug/L	126461237
2-Chloronaphthalene	1121954	ND	0.150	1.00	ug/L	126461237
2-Chlorophenol	1121954	ND	0.275	1.00	ug/L	126461237
2-Methylphenol (o-Cresol)	1121954	ND	8.48	10.0	ug/L	126461237
2-Nitrophenol	1121954	ND	0.554	1.00	ug/L	126461237
3&4-Methylphenol (m&p-Cresol)	1121954	ND	7.78	8.00	ug/L	126461237
3,3'-Dichlorobenzidine	1121954	ND	1.39	2.00	ug/L	126461237
4,6-Dinitro-2-methylphenol	1121954	ND	1.15	2.00	ug/L	126461237
4-Bromophenyl phenyl ether	1121954	ND	0.772	1.00	ug/L	126461237
4-Chlorophenyl phenyl ethe	1121954	ND	0.202	1.00	ug/L	126461237
4-Nitrophenol	1121954	ND	0.789	1.00	ug/L	126461237
Acenaphthene	1121954	ND	0.177	1.00	ug/L	126461237
Acenaphthylene	1121954	ND	0.240	1.00	ug/L	126461237
Aniline	1121954	ND	2470	2470	ug/L	126461237
Anthracene	1121954	ND	0.241	1.00	ug/L	126461237
Benzidine	1121954	ND	1.40	1.50	ug/L	126461237
Benzo(a)anthracene	1121954	ND	0.225	1.00	ug/L	126461237
Benzo(a)pyrene	1121954	ND	0.900	1.00	ug/L	126461237
Benzo(b)fluoranthene	1121954	ND	0.547	1.00	ug/L	126461237
Benzo(ghi)perylene	1121954	ND	0.881	1.00	ug/L	126461237
Benzo(k)fluoranthene	1121954	ND	0.252	1.00	ug/L	126461237
Benzyl Butyl phthalate	1121954	0.370	0.204	7.50	ug/L	126461237
Bis(2-chloroethoxy)methane	1121954	ND	0.277	1.00	ug/L	126461237
Bis(2-chloroethyl)ether	1121954	ND	0.348	1.00	ug/L	126461237
Bis(2-chloroisopropyl)ether	1121954	ND	0.738	1.00	ug/L	126461237
Bis(2-ethylhexyl)phthalate	1121954	ND	1.12	7.50	ug/L	126461237
Chrysene (Benzo(a)phenanthrene)	1121954	ND	0.289	1.00	ug/L	126461237
Dibenz(a,h)anthracene	1121954	ND	0.689	1.00	ug/L	126461237
Diethyl phthalate	1121954	ND	0.253	5.70	ug/L	126461237
Dimethyl phthalate	1121954	ND	0.540	4.80	ug/L	126461237
Di-n-butylphthalate	1121954	ND	0.978	7.50	ug/L	126461237
Di-n-octylphthalate	1121954	ND	1.92	2.00	ug/L	126461237
Fluoranthene(Benzo(j,k)fluorene)	1121954	ND	0.318	1.00	ug/L	126461237
Fluorene	1121954	ND	0.275	1.00	ug/L	126461237
Hexachlorobenzene	1121954	ND	0.871	1.00	ug/L	126461237
Hexachlorobutadiene	1121954	ND	1.03	1.03	ug/L	126461237
Hexachlorocyclopentadiene	1121954	ND	0.536	1.00	ug/L	126461237
Hexachloroethane	1121954	ND	1.05	2.00	ug/L	126461237
Indeno(1,2,3-cd)pyrene	1121954	ND	0.596	1.00	ug/L	126461237
Isophorone	1121954	ND	0.429	1.00	ug/L	126461237

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<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Naphthalene	1121954	ND	0.225	1.00	ug/L	126461237
Nitrobenzene	1121954	ND	0.271	1.00	ug/L	126461237
n-Nitrosodiethylamine	1121954	ND	0.747	1.00	ug/L	126461237
N-Nitrosodimethylamine	1121954	ND	0.542	1.00	ug/L	126461237
n-Nitroso-di-n-butylamine	1121954	ND	0.210	1.00	ug/L	126461237
N-Nitrosodi-n-propylamine	1121954	ND	0.425	1.00	ug/L	126461237
N-Nitrosodiphenylamine (as DPA	1121954	ND	0.404	1.00	ug/L	126461237
p-Chloro-m-Cresol (4-Chloro-3-me	1121954	ND	0.588	1.00	ug/L	126461237
Pentachlorobenzene	1121954	ND	0.977	1.00	ug/L	126461237
Pentachlorophenol	1121954	ND	0.960	5.00	ug/L	126461237
Phenanthrene	1121954	ND	0.269	1.00	ug/L	126461237
Phenol	1121954	ND	0.332	1.00	ug/L	126461237
Pyrene	1121954	ND	0.291	1.00	ug/L	126461237
Pyridine	1121954	ND	1.35	1.35	ug/L	126461237

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
1,2,4,5-Tetrachlorobenzene	48200	50000	ug/L	96.4	60.0 - 140	126461236
1,2,4-Trichlorobenzene	48600	50000	ug/L	97.2	61.0 - 130	126461236
1,2-Dichlorobenzene	47800	50000	ug/L	95.6	60.0 - 140	126461236
1,2-DPH (as azobenzene)	53400	50000	ug/L	107	60.0 - 140	126461236
1,3-Dichlorobenzene	43700	50000	ug/L	87.4	60.0 - 140	126461236
1,4-Dichlorobenzene	42500	50000	ug/L	85.0	60.0 - 140	126461236
2,4,5-Trichlorophenol	49400	50000	ug/L	98.8	69.0 - 130	126461236
2,4,6-Trichlorophenol	46000	50000	ug/L	92.0	69.0 - 130	126461236
2,4-Dichlorophenol	44700	50000	ug/L	89.4	64.0 - 130	126461236
2,4-Dimethylphenol	42200	50000	ug/L	84.4	58.0 - 130	126461236
2,4-Dinitrophenol	45400	50000	ug/L	90.8	39.0 - 173	126461236
2,4-Dinitrotoluene	50900	50000	ug/L	102	53.0 - 130	126461236
2,6-Dinitrotoluene	52000	50000	ug/L	104	68.0 - 137	126461236
2-Chloronaphthalene	41500	50000	ug/L	83.0	70.0 - 130	126461236
2-Chlorophenol	43300	50000	ug/L	86.6	55.0 - 130	126461236
2-Methylphenol (o-Cresol)	37700	50000	ug/L	75.4	60.0 - 140	126461236
2-Nitrophenol	46200	50000	ug/L	92.4	61.0 - 163	126461236
3&4-Methylphenol (m&p-Cresol)	38700	50000	ug/L	77.4	60.0 - 140	126461236
3,3'-Dichlorobenzidine	60900	50000	ug/L	122	18.0 - 213	126461236
4,6-Dinitro-2-methylphenol	47400	50000	ug/L	94.8	56.0 - 130	126461236
4-Bromophenyl phenyl ether	49400	50000	ug/L	98.8	70.0 - 130	126461236
4-Chlorophenyl phenyl ethe	46500	50000	ug/L	93.0	57.0 - 145	126461236
4-Nitrophenol	46000	50000	ug/L	92.0	35.0 - 135	126461236
Acenaphthene	50100	50000	ug/L	100	70.0 - 130	126461236
Acenaphthylene	50000	50000	ug/L	100	60.0 - 130	126461236
Aniline	39000	50000	ug/L	78.0	60.0 - 140	126461236
Anthracene	50700	50000	ug/L	101	58.0 - 130	126461236
Benzidine	27600	50000	ug/L	55.2	20.0 - 180	126461236

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<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Benzo(a)anthracene	50000	50000	ug/L	100	42.0 - 133	126461236
Benzo(a)pyrene	52000	50000	ug/L	104	32.0 - 148	126461236
Benzo(b)fluoranthene	47300	50000	ug/L	94.6	42.0 - 140	126461236
Benzo(ghi)perylene	50600	50000	ug/L	101	13.0 - 195	126461236
Benzo(k)fluoranthene	52400	50000	ug/L	105	25.0 - 146	126461236
Benzyl Butyl phthalate	51600	50000	ug/L	103	43.0 - 140	126461236
Bis(2-chloroethoxy)methane	49600	50000	ug/L	99.2	52.0 - 164	126461236
Bis(2-chloroethyl)ether	44400	50000	ug/L	88.8	52.0 - 130	126461236
Bis(2-chloroisopropyl)ether	47500	50000	ug/L	95.0	63.0 - 139	126461236
Bis(2-ethylhexyl)phthalate	44600	50000	ug/L	89.2	43.0 - 137	126461236
Chrysene (Benzo(a)phenanthrene)	49100	50000	ug/L	98.2	44.0 - 140	126461236
Dibenz(a,h)anthracene	55000	50000	ug/L	110	13.0 - 200	126461236
Diethyl phthalate	50000	50000	ug/L	100	47.0 - 130	126461236
Dimethyl phthalate	51200	50000	ug/L	102	50.0 - 130	126461236
Di-n-butylphthalate	48900	50000	ug/L	97.8	52.0 - 130	126461236
Di-n-octylphthalate	48600	50000	ug/L	97.2	21.0 - 132	126461236
Fluoranthene(Benzo(j,k)fluorene)	49000	50000	ug/L	98.0	47.0 - 130	126461236
Fluorene	49100	50000	ug/L	98.2	70.0 - 130	126461236
Hexachlorobenzene	50400	50000	ug/L	101	38.0 - 142	126461236
Hexachlorobutadiene	45900	50000	ug/L	91.8	68.0 - 130	126461236
Hexachlorocyclopentadiene	43600	50000	ug/L	87.2	60.0 - 140	126461236
Hexachloroethane	45100	50000	ug/L	90.2	55.0 - 130	126461236
Indeno(1,2,3-cd)pyrene	46000	50000	ug/L	92.0	13.0 - 151	126461236
Isophorone	56000	50000	ug/L	112	52.0 - 180	126461236
Naphthalene	47000	50000	ug/L	94.0	70.0 - 130	126461236
Nitrobenzene	40000	50000	ug/L	80.0	54.0 - 158	126461236
n-Nitrosodiethylamine	77500	50000	ug/L	155	60.0 - 140 *	126461236
N-Nitrosodimethylamine	42400	50000	ug/L	84.8	60.0 - 140	126461236
n-Nitroso-di-n-butylamine	46600	50000	ug/L	93.2	60.0 - 140	126461236
N-Nitrosodi-n-propylamine	47900	50000	ug/L	95.8	59.0 - 170	126461236
N-Nitrosodiphenylamine (as DPA	43500	50000	ug/L	87.0	60.0 - 140	126461236
p-Chloro-m-Cresol (4-Chloro-3-me	43800	50000	ug/L	87.6	68.0 - 130	126461236
Pentachlorobenzene	45500	50000	ug/L	91.0	60.0 - 140	126461236
Pentachlorophenol	46600	50000	ug/L	93.2	42.0 - 152	126461236
Phenanthrene	45600	50000	ug/L	91.2	67.0 - 130	126461236
Phenol	38600	50000	ug/L	77.2	48.0 - 130	126461236
Pyrene	47400	50000	ug/L	94.8	70.0 - 130	126461236
Pyridine	42800	50000	ug/L	85.6	60.0 - 140	126461236

DFTPP

<u>Parameter</u>		<u>RefMass</u>	<u>Reading</u>	<u>%</u>	<u>Limits%</u>	<u>File</u>
DFTPP Mass 127	625102	198	57901	52.8	40.0 - 60.0	126461234
DFTPP Mass 197	625102	198	0	0.0	0 - 1.00	126461234
DFTPP Mass 198	625102	198	109643	100.0	100 - 100	126461234
DFTPP Mass 199	625102	198	7184	6.6	5.00 - 9.00	126461234

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DFTPP

<u>Parameter</u>		<u>RefMass</u>	<u>Reading</u>	<u>%</u>	<u>Limits%</u>	<u>File</u>
DFTPP Mass 275	625102	198	32486	29.6	10.0 - 30.0	126461234
DFTPP Mass 365	625102	198	7319	6.7	1.00 - 100	126461234
DFTPP Mass 441	625102	443	3494	16.8	0 - 100	126461234
DFTPP Mass 442	625102	198	107965	98.5	40.0 - 100	126461234
DFTPP Mass 443	625102	442	20743	19.2	17.0 - 23.0	126461234
DFTPP Mass 51	625102	198	35046	32.0	30.0 - 60.0	126461234
DFTPP Mass 68	625102	69.0	0	0.0	0 - 2.00	126461234
DFTPP Mass 69	625102	198	37536	34.2	0 - 100	126461234
DFTPP Mass 70	625102	69.0	0	0.0	0 - 2.00	126461234

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,2,4,5-Tetrachlorobenzene	1121954	10.7	10.2	12.5	27.5 - 85.5	85.6 *	81.6	ug/L	4.78	50.0
1,2,4-Trichlorobenzene	1121954	11.3	9.13	12.5	44.0 - 142	90.4	73.0	ug/L	21.3	50.0
1,2-Dichlorobenzene	1121954	10.1	9.32	12.5	23.0 - 81.8	80.8	74.6	ug/L	7.98	50.0
1,2-DPH (as azobenzene)	1121954	11.9	10.2	12.5	12.6 - 110	95.2	81.6	ug/L	15.4	50.0
1,3-Dichlorobenzene	1121954	10.6	9.26	12.5	21.1 - 80.5	84.8 *	74.1	ug/L	13.5	50.0
1,4-Dichlorobenzene	1121954	10.4	8.53	12.5	21.4 - 76.9	83.2 *	68.2	ug/L	19.8	50.0
2,4,5-Trichlorophenol	1121954	12.7	11.5	12.5	51.3 - 109	102	92.0	ug/L	10.3	50.0
2,4,6-Trichlorophenol	1121954	12.7	11.6	12.5	37.0 - 144	102	92.8	ug/L	9.45	58.0
2,4-Dichlorophenol	1121954	10.8	9.67	12.5	39.0 - 135	86.4	77.4	ug/L	11.0	50.0
2,4-Dimethylphenol	1121954	1.29	1.02	12.5	23.0 - 120	10.3 *	8.16 *	ug/L	23.2	68.0
2,4-Dinitrophenol	1121954	11.1	13.4	12.5	0.100 - 191	88.8	107	ug/L	18.6	132
2,4-Dinitrotoluene	1121954	10.7	12.6	12.5	39.0 - 139	85.6	101	ug/L	16.5	42.0
2,6-Dinitrotoluene	1121954	10.8	12.4	12.5	50.0 - 158	86.4	99.2	ug/L	13.8	48.0
2-Chloronaphthalene	1121954	12.3	9.87	12.5	60.0 - 120	98.4	79.0	ug/L	21.9	24.0
2-Chlorophenol	1121954	11.0	10.1	12.5	23.0 - 134	88.0	80.8	ug/L	8.53	61.0
2-Methylphenol (o-Cresol)	1121954	7.81	7.89	12.5	38.9 - 76.1	62.5	63.1	ug/L	0.955	50.0
2-Nitrophenol	1121954	12.2	10.2	12.5	29.0 - 182	97.6	81.6	ug/L	17.9	55.0
3&4-Methylphenol (m&p-Cresol)	1121954	6.93	6.20	12.5	33.0 - 70.4	55.4	49.6	ug/L	11.0	50.0
3,3'-Dichlorobenzidine	1121954	9.98	8.09	12.5	0.100 - 262	79.8	64.7	ug/L	20.9	108
4,6-Dinitro-2-methylphenol	1121954	10.7	10.6	12.5	0.100 - 181	85.6	84.8	ug/L	0.939	203
4-Bromophenyl phenyl ether	1121954	12.6	11.3	12.5	53.0 - 127	101	90.4	ug/L	11.1	43.0
4-Chlorophenyl phenyl ether	1121954	10.8	11.4	12.5	25.0 - 158	86.4	91.2	ug/L	5.41	61.0
4-Nitrophenol	1121954	3.82	5.60	12.5	0.100 - 132	30.6	44.8	ug/L	37.7	131
Acenaphthene	1121954	12.1	12.3	12.5	47.0 - 145	96.8	98.4	ug/L	1.64	48.0
Acenaphthylene	1121954	11.6	10.7	12.5	33.0 - 145	92.8	85.6	ug/L	8.07	74.0
Aniline	1121954	7890	7210	12500	70.0 - 130	63.1 *	57.7 *	ug/L	8.94	50.0
Anthracene	1121954	12.4	10.5	12.5	27.0 - 133	99.2	84.0	ug/L	16.6	66.0
Benzo(a)anthracene	1121954	11.1	10.5	12.5	33.0 - 143	88.8	84.0	ug/L	5.56	53.0
Benzo(a)pyrene	1121954	11.4	10.9	12.5	17.0 - 163	91.2	87.2	ug/L	4.48	72.0
Benzo(b)fluoranthene	1121954	10.3	10.4	12.5	24.0 - 159	82.4	83.2	ug/L	0.966	71.0
Benzo(ghi)perylene	1121954	12.3	11.1	12.5	0.100 - 219	98.4	88.8	ug/L	10.3	97.0
Benzo(k)fluoranthene	1121954	12.4	12.2	12.5	11.0 - 162	99.2	97.6	ug/L	1.63	63.0
Benzyl Butyl phthalate	1121954	11.8	10.8	12.5	0.100 - 152	94.4	86.4	ug/L	8.85	60.0

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LCS Dup

Parameter	PrepSet	LCS	LCS D	Known	Limits%	LCS%	LCS D%	Units	RPD	Limit%
Bis(2-chloroethoxy)methane	1121954	12.5	10.6	12.5	33.0 - 184	100	84.8	ug/L	16.5	54.0
Bis(2-chloroethyl)ether	1121954	11.9	10.2	12.5	12.0 - 158	95.2	81.6	ug/L	15.4	108
Bis(2-chloroisopropyl)ether	1121954	11.9	12.6	12.5	36.0 - 166	95.2	101	ug/L	5.91	76.0
Bis(2-ethylhexyl)phthalate	1121954	12.5	12.6	12.5	8.00 - 158	100	101	ug/L	0.995	82.0
Chrysene (Benzo(a)phenanthrene)	1121954	11.5	9.88	12.5	17.0 - 168	92.0	79.0	ug/L	15.2	87.0
Dibenz(a,h)anthracene	1121954	12.0	10.7	12.5	0.100 - 227	96.0	85.6	ug/L	11.5	126
Diethyl phthalate	1121954	12.2	12.1	12.5	0.100 - 120	97.6	96.8	ug/L	0.823	100
Dimethyl phthalate	1121954	11.4	11.8	12.5	0.100 - 120	91.2	94.4	ug/L	3.45	183
Di-n-butylphthalate	1121954	13.1	11.0	12.5	1.00 - 120	105	88.0	ug/L	17.6	47.0
Di-n-octylphthalate	1121954	11.2	11.2	12.5	4.00 - 146	89.6	89.6	ug/L	0	69.0
Fluoranthene(Benzo(j,k)fluorene)	1121954	12.9	12.4	12.5	26.0 - 137	103	99.2	ug/L	3.76	66.0
Fluorene	1121954	11.5	12.3	12.5	59.0 - 121	92.0	98.4	ug/L	6.72	38.0
Hexachlorobenzene	1121954	12.2	10.9	12.5	0.100 - 152	97.6	87.2	ug/L	11.3	55.0
Hexachlorobutadiene	1121954	10.6	7.47	12.5	24.0 - 120	84.8	59.8	ug/L	34.6	62.0
Hexachlorocyclopentadiene	1121954	7.27	7.00	12.5	3.97 - 68.7	58.2	56.0	ug/L	3.85	50.0
Hexachloroethane	1121954	9.64	7.78	12.5	40.0 - 120	77.1	62.2	ug/L	21.4	52.0
Indeno(1,2,3-cd)pyrene	1121954	12.2	10.6	12.5	0.100 - 171	97.6	84.8	ug/L	14.0	99.0
Isophorone	1121954	12.0	11.1	12.5	21.0 - 196	96.0	88.8	ug/L	7.79	93.0
Naphthalene	1121954	10.6	9.59	12.5	21.0 - 133	84.8	76.7	ug/L	10.0	65.0
Nitrobenzene	1121954	10.9	8.82	12.5	35.0 - 180	87.2	70.6	ug/L	21.0	62.0
n-Nitrosodiethylamine	1121954	23.7	20.1	12.5	18.0 - 100	190 *	161 *	ug/L	16.5	50.0
N-Nitrosodimethylamine	1121954	7.94	7.85	12.5	30.2 - 74.9	63.5	62.8	ug/L	1.11	50.0
n-Nitroso-di-n-butylamine	1121954	11.1	12.2	12.5	48.4 - 98.5	88.8	97.6	ug/L	9.44	50.0
N-Nitrosodi-n-propylamine	1121954	12.4	10.7	12.5	0.100 - 230	99.2	85.6	ug/L	14.7	87.0
N-Nitrosodiphenylamine (as DPA	1121954	10.8	9.96	12.5	49.3 - 94.2	86.4	79.7	ug/L	8.07	50.0
p-Chloro-m-Cresol (4-Chloro-3-me	1121954	9.94	11.8	12.5	22.0 - 147	79.5	94.4	ug/L	17.1	70.0
Pentachlorobenzene	1121954	9.99	10.6	12.5	39.3 - 93.7	79.9	84.8	ug/L	5.95	50.0
Pentachlorophenol	1121954	11.4	11.9	12.5	14.0 - 176	91.2	95.2	ug/L	4.29	86.0
Phenanthrene	1121954	12.0	11.4	12.5	54.0 - 120	96.0	91.2	ug/L	5.13	39.0
Phenol	1121954	5.05	4.83	12.5	5.00 - 120	40.4	38.6	ug/L	4.56	64.0
Pyrene	1121954	10.5	10.5	12.5	52.0 - 120	84.0	84.0	ug/L	0	49.0
Pyridine	1121954	6.50	5.82	12.5	11.2 - 50.6	52.0 *	46.6	ug/L	11.0	50.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	625306	CCV	44300	100000	ug/L	44.3	10.0 - 150	126461236
2-Fluorophenol-SURR	625306	CCV	39200	100000	ug/L	39.2	10.0 - 150	126461236
4-Terphenyl-d14-SURR	625306	CCV	40600	50000	ug/L	81.2	30.0 - 150	126461236
Nitrobenzene-d5-SURR	625306	CCV	43500	50000	ug/L	87.0	30.0 - 150	126461236
Phenol-d6-SURR	625306	CCV	44100	100000	ug/L	44.1	10.0 - 150	126461236
2,4,6-Tribromophenol	1121954	Blank	66.8	100	ug/L	66.8	10.0 - 150	126461237
2,4,6-Tribromophenol	1121954	LCS	61.8	100	ug/L	61.8	10.0 - 150	126461238
2,4,6-Tribromophenol	1121954	LCS Dup	64.6	100	ug/L	64.6	10.0 - 150	126461239
2-Fluorophenol-SURR	1121954	Blank	31400	100000	ug/L	31.4	10.0 - 150	126461237
2-Fluorophenol-SURR	1121954	LCS	36400	100000	ug/L	36.4	10.0 - 150	126461238

Email: Kilgore.ProjectManagement@spllabs.com



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QUALITY CONTROL



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SPAC-R

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Space Exploration Technologies
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Brownsville, TX 78521

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Surrogate								
Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2-Fluorophenol-SURR	1121954	LCS Dup	33800	100000	ug/L	33.8	10.0 - 150	126461239
4-Terphenyl-d14-SURR	1121954	Blank	35400	50000	ug/L	70.8	30.0 - 150	126461237
4-Terphenyl-d14-SURR	1121954	LCS	19500	50000	ug/L	39.0	30.0 - 150	126461238
4-Terphenyl-d14-SURR	1121954	LCS Dup	19500	50000	ug/L	39.0	30.0 - 150	126461239
Nitrobenzene-d5-SURR	1121954	Blank	43700	50000	ug/L	87.4	30.0 - 150	126461237
Nitrobenzene-d5-SURR	1121954	LCS	20900	50000	ug/L	41.8	30.0 - 150	126461238
Nitrobenzene-d5-SURR	1121954	LCS Dup	17300	50000	ug/L	34.6	30.0 - 150	126461239
Phenol-d6-SURR	1121954	Blank	27800	100000	ug/L	27.8	10.0 - 150	126461237
Phenol-d6-SURR	1121954	LCS	25900	100000	ug/L	25.9	10.0 - 150	126461238
Phenol-d6-SURR	1121954	LCS Dup	24500	100000	ug/L	24.5	10.0 - 150	126461239
2,4,6-Tribromophenol	2302895	Unknown	76.1	98.8	ug/L	77.0	10.0 - 150	126461243
2-Fluorophenol-SURR	2302895	Unknown	41.1	98.8	ug/L	41.6	10.0 - 150	126461243
4-Terphenyl-d14-SURR	2302895	Unknown	35.3	49.4	ug/L	71.5	30.0 - 150	126461243
Nitrobenzene-d5-SURR	2302895	Unknown	36.1	49.4	ug/L	73.1	30.0 - 150	126461243
Phenol-d6-SURR	2302895	Unknown	28.9	98.8	ug/L	29.3	10.0 - 150	126461243

Analytical Set

1121775

SM 5220 D-2011

CCV								
<i>Parameter</i>	<i>Reading</i>	<i>Known</i>	<i>Units</i>	<i>Recover%</i>	<i>Limits%</i>	<i>File</i>		
Chemical Oxygen Demand	422	400	mg/L	106	90.0 - 110	126389115		
Duplicate								
<i>Parameter</i>	<i>Sample</i>	<i>Result</i>	<i>Unknown</i>		<i>Unit</i>	<i>RPD</i>	<i>Limit%</i>	
Chemical Oxygen Demand	2302625	ND	ND		mg/L		20.0	
Chemical Oxygen Demand	2303054	32.7	30.5		mg/L	6.96	20.0	
LCS								
<i>Parameter</i>	<i>PrepSet</i>	<i>Reading</i>	<i>Known</i>	<i>Units</i>	<i>Recover%</i>	<i>Limits</i>	<i>File</i>	
Chemical Oxygen Demand	1121775	203	200	mg/L	102	90.0 - 110	126389116	
Mat. Spike								
<i>Parameter</i>	<i>Sample</i>	<i>Spike</i>	<i>Unknown</i>	<i>Known</i>	<i>Units</i>	<i>Recovery %</i>	<i>Limits %</i>	<i>File</i>
Chemical Oxygen Demand	2302625	238	ND	220	mg/L	108	80.0 - 120	126389119
Chemical Oxygen Demand	2303054	253	30.5	220	mg/L	101	80.0 - 120	126389128

Analytical Set

1121996

SM 4500-P E-2011

AWRL/LOQ C						
Parameter	Reading	Known	Units	Recover%	Limits%	File
Phosphorus (as P), total	0.0662	0.060	mg/L	110	70.0 - 130	126393751
Blank						
Parameter	PrepSet	Reading	MDL	MQL	Units	File
Phosphorus (as P), total	1121996	ND	0.00311	0.00311	mg/L	126393749
CCV						
Parameter	Reading	Known	Units	Recover%	Limits%	File

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Space Exploration Technologies
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CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Phosphorus (as P), total	0.312	0.300	mg/L	104	90.0 - 110	126393752
Phosphorus (as P), total	0.306	0.300	mg/L	102	90.0 - 110	126393767
Phosphorus (as P), total	0.309	0.300	mg/L	103	90.0 - 110	126394129

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Phosphorus (as P), total	1121996	0.307	0.299	0.300	80.0 - 120	102	99.7	mg/L	2.64	20.0

MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Phosphorus (as P), total	2302930	0.265	0.257	0.120	0.150	70.0 - 130	96.7	91.3	mg/L	5.67	20.0
Phosphorus (as P), total	2302931	0.345	0.331	0.191	0.150	70.0 - 130	103	93.3	mg/L	9.52	20.0

Analytical Set

1122797

SM 2320 B-2011

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Total Alkalinity (as CaCO3)	1122797	ND	1.00	1.00	mg/L	126418426

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Total Alkalinity (as CaCO3)	24.5	25.0	mg/L	98.0	90.0 - 110	126418425
Total Alkalinity (as CaCO3)	25.4	25.0	mg/L	102	90.0 - 110	126418438

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Total Alkalinity (as CaCO3)	2302842	785	789	mg/L	0.508	20.0

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Total Alkalinity (as CaCO3)	26.9	25.0	mg/L	108	90.0 - 110	126418424

Mat. Spike

<u>Parameter</u>	<u>Sample</u>	<u>Spike</u>	<u>Unknown</u>	<u>Known</u>	<u>Units</u>	<u>Recovery %</u>	<u>Limits %</u>	<u>File</u>
Total Alkalinity (as CaCO3)	2302842	819	789	25.0	mg/L	120	70.0 - 130	126418429

Analytical Set

1123697

SM 2130 B-2011

AWRL/LOQ C

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Turbidity	0.350	0.300	NTU	117	70.0 - 130	126440048

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Turbidity	1123697	ND	0.300	0.300	NTU	126440046

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Turbidity	2305623	3.40	3.04	NTU	11.2	20.0

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SPAC-R

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Brownsville, TX 78521

Project
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Duplicate						
Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Turbidity	2307012	0.580	0.520	NTU	10.9	20.0
Mat. Spike						
Parameter	Sample	Spike	Unknown	Known	Units	Recovery % Limits % File
Turbidity	2305623	44.5	3.04	40.0	NTU	104 70.0 - 130 126440052
Turbidity	2307012	41.2	0.520	40.0	NTU	102 70.0 - 130 126440065
Standard						
Parameter	Sample	Reading	Known	Units	Recover%	Limits% File
Turbidity	1123697	10.1	10.0	NTU	101	90.0 - 110 126440047
Turbidity	1123697	101	100	NTU	101	90.0 - 110 126440049
Turbidity	1123697	10.0	10.0	NTU	100	90.0 - 110 126440060
Turbidity	1123697	10.4	10.0	NTU	104	90.0 - 110 126441062

* Out RPD is Relative Percent Difference: $\text{abs}(r1-r2) / \text{mean}(r1,r2) * 100\%$

Recover% is Recovery Percent: $\text{result} / \text{known} * 100\%$

Blank - Method Blank (reagent water or other blank matrices that contains all reagents except standard(s) and is processed simultaneously with and under the same conditions as samples; carried through preparation and analytical procedures exactly like a sample; monitors); MSD - Matrix Spike Duplicate (replicate of the matrix spike; same solution and amount of target analyte added to the MS is added to a third aliquot of sample; quantifies matrix bias and precision.); LCS Dup - Laboratory Control Sample Duplicate (replicate LCS; analyzed when there is insufficient sample for duplicate or MSD; quantifies accuracy and precision.); BFB - Bromofluorobenzene, GC/MS Tuning Compound (mass intensity used as tuning acceptance criteria.); Surrogate - Surrogate (mimics the analyte of interest but is unlikely to be found in environmental samples; added to analytical samples for QC purposes. **ANSI/ASQC E4 1994 Ref #4 TRADE QA Resources Guide.); IS Areas - Internal Standard Area (The area of the internal standard relative to a check standard. Internal Standard is a known concentration of an analyte(s) that is not a sample component or standard that is added to the sample and standard and is used to measure the relative responses of other analytes in the same sample or standard.); IS RetTime - Internal Standard Retention Time (the time the internal standard comes off the column. Internal Standard is a known concentration of an analyte(s) that is not a sample component or standard that is added to the sample and standard and is used to measure the relative responses of other analytes in the same sample or standard.); LCS - Laboratory Control Sample (reagent water or other blank matrices that is spiked with a known quantity of target analyte(s) and carried through preparation and analytical procedures exactly like a sample; typically a mid-range concentration; verifies that bias and precision of the analytical process are within control limits; determines usability of the data.); CCV - Continuing Calibration Verification (same standard used to prepare the curve; typically a mid-range concentration; verifies the continued validity of the calibration curve); CCB - Continuing Calibration Blank; AWRL/LOQ C - Ambient Water Reporting Limit/LOQ Check Std; ICV - Initial Calibration Verification; LDR - Linear Dynamic Range Standard; MRL Check - Minimum Reporting Limit Check Std; MS - Matrix Spike (same solution and amount of target analyte added to the LCS is added to a second aliquot of sample; quantifies matrix bias.); DFTPP - GC/MS Tuning Compound

Email: Kilgore.ProjectManagement@spllabs.com



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1105141 CoC Print Group 001 of 001

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CHAIN OF CUSTODY

Printed 02/28/2024

Page 2 of 2

SPACEX
 Rodolfo Longoria
 Space Exploration Technologies
 1 Rocket Rd
 Brownsville, TX 78521

SPAC-R
188

Phone

Mandatory
 956/543-6688

1 Polyethylene Quart

NELAC

Short Hold

TURB

Turbidity

SM 2130 B-2011 (2.00 days)

Ambient Conditions/Comments

Date/Time	Released	Date/Time	Received
5/29/24 0900	Printed Name: Zachary Smith Signature: [Signature] Affiliation: SPACEX	5/29 0402	Printed Name: Leo Munoz Signature: [Signature] Affiliation: [Affiliation]
5/29/24 9:32	Printed Name: Leo Munoz Signature: [Signature] Affiliation: [Affiliation]	5/29/24 9:32	Printed Name: [Signature] Signature: [Signature] Affiliation: SPL
5/29/24 17:30	Printed Name: [Signature] Signature: [Signature] Affiliation: SPL	5/29/24 17:30	Printed Name: [Signature] Signature: FedEx Affiliation: [Affiliation]
5/30/24 1110	Printed Name: [Signature] Signature: FedEx Affiliation: FedEx	5-30-24 1110	Printed Name: Andy Owens - SPL, Inc. Signature: [Signature] Affiliation: [Affiliation]

Sample Received on Ice?

☒ Yes ☐ No

Cooler/Sample Secure?

☒ Yes ☐ No

If Shipped: Tracking Number & Temp - See Attached

The accredited column designates accreditation by A - A2LA, N - NELAC, or Z - not listed under scope of accreditation. Unless otherwise specified, ANA-LAB shall provide these ordered services pursuant to our Standard Terms & Conditions Agreement (available for download from the welcome page at <<http://www.ana-lab.com>>). Ana-Lab personnel collect samples as specified by Ana-Lab SOP #000323.

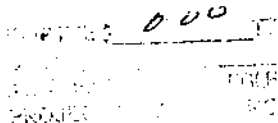
Comments



RGV Region: 2401 Village Dr. Suite C Brownsville TX 78521

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1 Rocket Rd
Brownsville, TX 78521

SPAC-R
178

Lab Number 2302894
Mandatory 2605353
PO Number 2605353
Phone 956/543-6688

INFLUENT

Hand Delivered by Client to Region or LAB

Matrix: Non-Potable Water

Sample Collection Start

Date: 5/29/24 Time: 0830
Sampler Printed Name: Zachary Smith
Sampler Affiliation: SPACEX
Sampler Signature: [Signature]

☐ Samples Radioactive?☐ Samples Contain Dioxin?☐ Samples Biological Hazard?☒ 1

Polyethylene 1/2 gal (White)

NELAC

Short Hold

BOD

Biochemical Oxygen Demand (BOD5)

SM 5210 B-2016 CAS:1026-3 (2.04 days)

☒ 1

H2SO4 to pH <2 250 ml Polyethylene

NELAC

NHAN

Ammonia Nitrogen

EPA 350.1 2 (28.0 days)

Ambient Conditions/Comments

Date Time	Relinquished	Date Time	Received
5/29/24 0900	Printed Name: <u>Zachary Smith</u> Signature: <u>[Signature]</u> Affiliation: <u>SPACEX</u>	06/03/24 1903	Printed Name: <u>Leo Munoz</u> Signature: <u>[Signature]</u> Affiliation: <u>[Signature]</u>
5/29/24 9:32	Printed Name: <u>Leo Munoz</u> Signature: <u>[Signature]</u> Affiliation: <u>[Signature]</u>	5/29/24 9:32	Printed Name: <u>[Signature]</u> Signature: <u>[Signature]</u> Affiliation: <u>SPL</u>
5/29/24 12:30	Printed Name: <u>[Signature]</u> Signature: <u>[Signature]</u> Affiliation: <u>SPL</u>	5/29/24 1713	Printed Name: <u>[Signature]</u> Signature: <u>[Signature]</u> Affiliation: <u>FedEx</u>
5/30/24 1110	Printed Name: <u>[Signature]</u> Signature: <u>[Signature]</u> Affiliation: <u>FedEx</u>	5/30/24 1110	Printed Name: <u>Andy Owens - SPL, Inc.</u> Signature: <u>[Signature]</u> Affiliation: <u>[Signature]</u>



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The Science of Sure

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Page 1 of 6

SPACE
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Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

SPAC-R
194

Lab Number 2302895
PO Number _____ Mandatory
Phone 956/543-6688

Waste Water

Retention Pond



Hand Delivered by Client to Region or LAB

Matrix: Non-Potable Water

Sample Collection Start

Date: 5.28.24 Time: 3:50 PMSampler Printed Name: CAROLYN WOODSampler Affiliation: SPACEXSampler Signature: Carolyn A. WoodSamples Radioactive? ☐Samples Contain Dioxin? ☐Samples Biological Hazard? ☐

0

On Site Testing

NELAC

CI20

CI2 Res., Total(Onsite)Spec Mid

SM 4500-CI G-2011

CI2 Res., Total(Onsite)Spec Mid

Collected By CW Date 5.28.24 Time 3:50 PM Analyzed By _____ Date _____ Time _____

Results _____ Units _____ Temp. _____ C Duplicate _____ Units _____ Temp. _____ C

R1 _____ R2 _____ QC R1 _____ QC R2 _____

by client
Total CI2
0.2 mg/L

CI2

Field CI2 Check for CNA

Field CI2 Check for CNA

Collected By CW Date 5.28.24 Time 3:50 PM Analyzed By _____ Date _____ Time _____

Results _____ Units _____ Temp. _____ C Duplicate _____ Units _____ Temp. _____ C

R1 _____ R2 _____ QC R1 _____ QC R2 _____

NELAC Short Hold

Cr6F

Hex Cr, Field Preservation

SM 3500-Cr B-2011 CAS:18540-29-9 (1.00 days)



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SPACE
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Brownsville, TX 78521

SPAC-R
194

Hex Cr, Field Preservation

Collected By CW Date 5-28-24 Time 3:57p Analyzed By Jmz Date 5/28/24 Time 18:40

NELAC Short Hold

DO

Dissolved Oxygen Onsite

SM 4500-O G-2016 (0.0104 days)

Dissolved Oxygen Onsite

Collected By CW Date 5-28-24 Time 3:50p Analyzed By _____ Date _____ Time _____

Results _____ Units _____ Temp. _____ C Duplicate _____ Units _____ Temp. _____ C

NELAC Short Hold

pH

pH (Onsite)

SM 4500-H B-2011 (0.0104 days)

pH (Onsite)

Collected By CW Date 5-28-24 Time 3:50p Analyzed By _____ Date _____ Time _____

by client
pH 6.97

Results _____ Units _____ Temp. _____ C Duplicate _____ Units _____ Temp. _____ C

S2O₃²⁻

Field Sulfide Check for CNa

Field Sulfide Check for CNa

Collected By CW Date 5-28-24 Time 3:50p Analyzed By _____ Date _____ Time _____

Results _____ Units _____ Temp. _____ C Duplicate _____ Units _____ Temp. _____ C

R1

R2

QC R1

QC R2

NELAC Short Hold

Temp

Temperature (onsite)

SM 2550 B - 2010 (0.0104 days)



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SPAC-R
194

Temperature (outside)

Collected By CW Date 5.25.24 Time 3:54P Analyzed By _____ Date _____ Time _____

Results _____ Units _____ Duplicate _____ Units _____

2 Amber Glass Qt w/Teflon lined lid

NELAC	ID2S	Table D-1/ D-2 Semivolatiles Exp	EPA 625.1 (7.00 days)
NELAC	IPCB	Polychlorinated Biphenyls	EPA 608.3 (7.00 days)

2 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid

NELAC	Short Hold	SAAB	Acrolein/Acrylonitrile Exp.	EPA 624.1 (3.00 days)

2 H2SO4 to pH <2 GIQt w/Tef-lined lid

	NYPB	Nonyl Phenol Expansion	ASTM D7065-11 (14.0 days)

1 H2SO4 to pH <2 GIQt w/Tef-lined lid

NELAC	HEM	Oil and Grease (HEM)	EPA 1664B (HEM) (28.0 days)

1 Polyethylene 1/2 gal (White)

NELAC	Short Hold	BOD	Biochemical Oxygen Demand (BOD5)	SM 5210 B-2016 CAS:1026-3 (2.04 days)
NELAC	Short Hold	BODc	BOD Carbonaceous	SM 5210 B-2016 (TCMP Inhibitor) (2.04 days)
NELAC		TSS	Total Suspended Solids	SM 2540 D-2015 (7.00 days)

0 Z - No bottle required

	CKLM	Check Limits		
NELAC	Short Hold	Cr+3	Trivalent Chromium	Calculation CAS:16065-R3-1 (1.00 days)

1 HNO3 to pH <2 Polyethylene 500 mL for Metals

NELAC	*AgM	Silver, Total	EPA 200.8 5.4 CAS:7440-22-4 (180 days)
NELAC	*AlM	Aluminum, Total	EPA 200.8 5.4 CAS:7429-90-5 (180 days)



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2600 Dudley Rd. Kilgore, Texas 75662
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NELAC	*AsM	Arsenic, Total	EPA 200.8 5.4 CAS:7440-38-2 (180 days)
NELAC	*BaM	Barium, Total	EPA 200.8 5.4 CAS:7440-39-3 (180 days)
NELAC	*BeM	Beryllium, Total	EPA 200.8 5.4 CAS:7440-41-7 (180 days)
NELAC	*CdM	Cadmium, Total	EPA 200.8 5.4 CAS:7440-43-9 (180 days)
NELAC	*CrM	Chromium, Total	EPA 200.8 5.4 CAS:7440-47-3 (180 days)
NELAC	*CuM	Copper, Total	EPA 200.8 5.4 CAS:7440-50-8 (180 days)
NELAC	*Hg	Mercury, Total	EPA 245.1 3 CAS:7439-97-6 (28.0 days)
NELAC	*NiM	Nickel, Total	EPA 200.8 5.4 CAS:7440-02-0 (180 days)
NELAC	*PbM	Lead, Total	EPA 200.8 5.4 CAS:7439-92-1 (180 days)
NELAC	*SbM	Antimony, Total	EPA 200.8 5.4 CAS:7440-36-0 (180 days)
NELAC	*SeM	Selenium, Total	EPA 200.8 5.4 CAS:7782-49-2 (180 days)
NELAC	*TlM	Thallium, Total	EPA 200.8 5.4 CAS:7440-28-0 (180 days)
NELAC	*ZnM	Zinc, Total	EPA 200.8 5.4 CAS:7440-66-6 (180 days)
	301L	Liquid Metals Digestion	EPA 200.2 2.8 (180 days)
NELAC	747L	Mercury Liquid Metals Digestion	EPA 245.1 3 (28.0 days)

3 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)

Short Hold ID2V Table D-1/D-2 Volatile Expansion EPA 624.1 (3.00 days)

2 H2SO4 to pH <2 250 ml Polyethylene

NELAC	OOD	Chemical Oxygen Demand	SM 5220 D-2011 (28.0 days)
NELAC	NHAN	Ammonia Nitrogen	EPA 350.1 2 (28.0 days)
	OrgN	Nitrogen, Total Organic (as N)	EPA 351.2 minus EPA 350.1 (28.0 days)
NELAC	TKN	Total Kjeldahl Nitrogen	EPA 351.2 2 CAS:7727-37-9 (28.0 days)
NELAC	TFWB	Phosphorus (as P), total	SM 4500-P E-2011 CAS:7723-14-0 (28.0 days)

1 H2SO4 to pH <2 Glass 250 mL w/Teflon lined lid

NELAC TOCL Total Organic Carbon SM 5310 C-2014 (28.0 days)



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2 NaOH to pH >12 Polyethylene 250 mL/amber

NELAC	CN ⁻	Cyanide, total	SM 4500-CN ⁻ E-2016 (14.0 days)
NELAC	CN ⁻ A	Cyanide - Available/Amenable	SM 4500-CN ⁻ G-2016 (14.0 days)
NELAC	CNCl	Cyanide After Chlorination	SM 4500-CN ⁻ G-2016 (14.0 days)

1 Polyethylene Quart

NELAC	ICL	Chloride	EPA 300.0 2.1 (28.0 days)
NELAC	FFL	Fluoride	EPA 300.0 2.1 (28.0 days)
NELAC Short Hold	NTL	Nitrate-Nitrogen Total	EPA 300.0 2.1 CAS:14797-55-8 (2.00 days)
NELAC	ISL	Sulfate	EPA 300.0 2.1 (28.0 days)
NELAC	AlkT	Total Alkalinity (as CaCO ₃)	SM 2320 B-2011 (14.0 days)
NELAC Short Hold	Cr+6	Hexavalent Chromium	SM 3500-Cr B-2011 CAS:18540-29-9 (1.00 days)
NELAC	TDS	Total Dissolved Solids	SM 2540 C-2015 (7.00 days)

Ambient Conditions/Comments

Date	Time	Relinquished	Received
5-28-24	6:20 pm	Printed Name: Carolyn Wood Signature: Carolyn Wood Affiliation: SPACEX	Printed Name: [Signature] Signature: [Signature] Affiliation: SPL
5/29/24	12:12	Printed Name: [Signature] Signature: [Signature] Affiliation: SPL	Printed Name: [Signature] Signature: FedEx Affiliation:
		Printed Name: [Signature] Signature: FedEx Affiliation:	Printed Name: [Signature] Signature: [Signature] Affiliation:
		Printed Name: [Signature] Signature: [Signature] Affiliation:	Printed Name: [Signature] Signature: [Signature] Affiliation:



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ORIGIN ID: HRLA
ANA LAB / RGV
2401 VILLAGE DR ST
BROWNSVILLE, TX 77801
UNITED STATES US

SHIP DATE: 29MAY24
ACTWT: 70.05 LB
CAD: 6894257/SSFE2500
DIMS: 24x14x13 IN
BILL THIRD PARTY

TO SPL
LOGIN
2600 DUDLEY RD
KILGORE TX 75662
(565) 565-8665
INVT
PG1

SHIP DATE: 29MAY24
ACTWT: 70.05 LB
CAD: 6894257/SSFE2500
DIMS: 24x14x13 IN
BILL THIRD PARTY

3 of 3
MP# 2752 6939 0395
Matr# 8171 3103 550
XS GCGA

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PRIORITY OVERNIGHT
AHS
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DATE: 5/30/24
TIME: 11:10
TECH: ANU
TEMP: 1.3 1.4 C
Therm#: 6443 Corr Fact: 0.1 C

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1106094_r03_03_ProjectResults	SPL Kilgore Project P:1106094 C:SPAC Project Results t:304 PO: 2305623-5	13
1106094_r10_05_ProjectQC	SPL Kilgore Project P:1106094 C:SPAC Project Quality Control Groups	31
1106094_r99_09_CoC__1_of_1	SPL Kilgore CoC SPAC 1106094_1_of_1	7
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Sample	Sample ID	Taken	Time	Received
2305623	WW - Retention Pond	06/06/2024	13:30:00	06/07/2024

Bottle 01 Polyethylene 1/2 gal (White)
 Bottle 02 Polyethylene Quart
 Bottle 03 Amber 32 Oz
 Bottle 04 Amber 32 Oz
 Bottle 05 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 06 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 07 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
 Bottle 08 16 oz HNO3 Metals Plastic
 Bottle 09 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
 Bottle 10 NaOH to pH >12 Polyethylene 250 mL/amber
 Bottle 11 NaOH to pH >12 Polyethylene 250 mL/amber
 Bottle 12 Cr+6 Preserved 250 Polyethylene
 Bottle 13 8 oz Plastic H2SO4 pH < 2
 Bottle 14 8 oz Plastic H2SO4 pH < 2
 Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
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 Bottle 19 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
 Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122859) Volume: 10.00000 mL <== Derived from 11 (5 ml)
 Bottle 21 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
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 Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1122995) Volume: 20.00000 mL <== Derived from 14 (20 ml)
 Bottle 29 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1123008) Volume: 6.00000 mL <== Derived from 14 (6 ml)
 Bottle 30 Prepared Bottle: Mercury Preparation for Metals (Batch 1123013) Volume: 50.00000 mL <== Derived from 08 (25 ml)
 Bottle 31 Prepared Bottle: ICP Preparation for Metals (Batch 1123060) Volume: 50.00000 mL <== Derived from 08 (50 ml)
 Bottle 32 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1123138) Volume: 10.00000 mL <== Derived from 03 (1025 ml)
 Bottle 33 Prepared Bottle: 2 mL Autosampler Vial (Batch 1123370) Volume: 1.00000 mL <== Derived from 04 (939 ml)
 Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1124341) Volume: 1.00000 mL <== Derived from 07 (862 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 608.3	32	1123138	06/10/2024	1123853	06/13/2024
EPA 300.0 2.1	01	1123092	06/07/2024	1123092	06/07/2024
EPA 300.0 2.1	01	1124447	06/18/2024	1124447	06/18/2024
EPA 625.1	33	1123370	06/11/2024	1125008	06/18/2024

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Bottle 13 8 oz Plastic H2SO4 pH < 2
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Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 624.1	19	1123033	06/07/2024	1123033	06/07/2024
EPA 624.1	16	1123030	06/07/2024	1123030	06/07/2024
ASTM D7065-11	34	1124341	06/17/2024	1124948	06/19/2024
EPA 200.8 5.4	32	1123138	06/10/2024	1123222	06/10/2024

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Bottle 08 16 oz HNO3 Metals Plastic
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Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 200.8 5.4	31	1123060	06/10/2024	1123439	06/11/2024
EPA 200.7 4.4	31	1123060	06/10/2024	1123677	06/12/2024
EPA 245.1 3	30	1123013	06/10/2024	1123073	06/10/2024
EPA 200.8 5.4	31	1123060	06/10/2024	1124795	06/19/2024

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Page 4 of 9

Sample	Sample ID	Taken	Time	Received
2305623	WW - Retention Pond	06/06/2024	13:30:00	06/07/2024

- Bottle 01 Polyethylene 1/2 gal (White)
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Bottle 09 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
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Bottle 30 Prepared Bottle: Mercury Preparation for Metals (Batch 1123013) Volume: 50.00000 mL <== Derived from 08 (25 ml)
Bottle 31 Prepared Bottle: ICP Preparation for Metals (Batch 1123060) Volume: 50.00000 mL <== Derived from 08 (50 ml)
Bottle 32 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1123138) Volume: 10.00000 mL <== Derived from 03 (1025 ml)
Bottle 33 Prepared Bottle: 2 mL Autosampler Vial (Batch 1123370) Volume: 1.00000 mL <== Derived from 04 (939 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1124341) Volume: 1.00000 mL <== Derived from 07 (862 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 2320 B-2011	01	1123173	06/10/2024	1123173	06/10/2024
SM 5210 B-2016	01	1122943	06/13/2024	1122943	06/13/2024
SM 5210 B-2016 (TCMP Inhibitor)	01	1122944	06/13/2024	1122944	06/13/2024
SM 4500-CN ⁻ G-2016			06/19/2024		06/19/2024

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Page 5 of 9

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Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 17 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 18 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 19 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122859) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 21 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 22 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 24 BOD Titration Beaker A (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 25 BOD Analytical Beaker B (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 26 BOD Titration Beaker A (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1122995) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1123008) Volume: 6.00000 mL <== Derived from 14 (6 ml)
Bottle 30 Prepared Bottle: Mercury Preparation for Metals (Batch 1123013) Volume: 50.00000 mL <== Derived from 08 (25 ml)
Bottle 31 Prepared Bottle: ICP Preparation for Metals (Batch 1123060) Volume: 50.00000 mL <== Derived from 08 (50 ml)
Bottle 32 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1123138) Volume: 10.00000 mL <== Derived from 03 (1025 ml)
Bottle 33 Prepared Bottle: 2 mL Autosampler Vial (Batch 1123370) Volume: 1.00000 mL <== Derived from 04 (939 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1124341) Volume: 1.00000 mL <== Derived from 07 (862 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 4500-CN ⁻ G-2016	21	1122879	06/07/2024	1123107	06/10/2024
SM 4500-CN ⁻ E-2016	20	1122859	06/07/2024	1123105	06/10/2024
SM 5220 D-2011	14	1123591	06/12/2024	1123591	06/12/2024
SM 4500-CI G-2011		1122809	06/06/2024	1122809	06/06/2024

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Sample	Sample ID	Taken	Time	Received
2305623	WW - Retention Pond	06/06/2024	13:30:00	06/07/2024

- Bottle 01 Polyethylene 1/2 gal (White)
Bottle 02 Polyethylene Quart
Bottle 03 Amber 32 Oz
Bottle 04 Amber 32 Oz
Bottle 05 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 06 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 07 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 08 16 oz HNO3 Metals Plastic
Bottle 09 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 10 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 11 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 12 Cr+6 Preserved 250 Polyethylene
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 17 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 18 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 19 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122859) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 21 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 22 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 24 BOD Titration Beaker A (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 25 BOD Analytical Beaker B (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 26 BOD Titration Beaker A (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1122995) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1123008) Volume: 6.00000 mL <== Derived from 14 (6 ml)
Bottle 30 Prepared Bottle: Mercury Preparation for Metals (Batch 1123013) Volume: 50.00000 mL <== Derived from 08 (25 ml)
Bottle 31 Prepared Bottle: ICP Preparation for Metals (Batch 1123060) Volume: 50.00000 mL <== Derived from 08 (50 ml)
Bottle 32 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1123138) Volume: 10.00000 mL <== Derived from 03 (1025 ml)
Bottle 33 Prepared Bottle: 2 mL Autosampler Vial (Batch 1123370) Volume: 1.00000 mL <== Derived from 04 (939 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1124341) Volume: 1.00000 mL <== Derived from 07 (862 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
Calculation			06/19/2024		06/19/2024
SM 3500-Cr B-2011	12	1122852	06/07/2024	1122852	06/07/2024
SM 3500-Cr B-2011		1122789	06/06/2024	1122789	06/06/2024
SM 4500-O G-2016		1122811	06/06/2024	1122811	06/06/2024

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Sample	Sample ID	Taken	Time	Received
2305623	WW - Retention Pond	06/06/2024	13:30:00	06/07/2024

- Bottle 01 Polyethylene 1/2 gal (White)
Bottle 02 Polyethylene Quart
Bottle 03 Amber 32 Oz
Bottle 04 Amber 32 Oz
Bottle 05 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 06 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 07 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 08 16 oz HNO3 Metals Plastic
Bottle 09 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 10 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 11 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 12 Cr+6 Preserved 250 Polyethylene
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 17 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
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Bottle 19 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122859) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 21 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 22 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
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Bottle 24 BOD Titration Beaker A (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 25 BOD Analytical Beaker B (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 26 BOD Titration Beaker A (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1122995) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1123008) Volume: 6.00000 mL <== Derived from 14 (6 ml)
Bottle 30 Prepared Bottle: Mercury Preparation for Metals (Batch 1123013) Volume: 50.00000 mL <== Derived from 08 (25 ml)
Bottle 31 Prepared Bottle: ICP Preparation for Metals (Batch 1123060) Volume: 50.00000 mL <== Derived from 08 (50 ml)
Bottle 32 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1123138) Volume: 10.00000 mL <== Derived from 03 (1025 ml)
Bottle 33 Prepared Bottle: 2 mL Autosampler Vial (Batch 1123370) Volume: 1.00000 mL <== Derived from 04 (939 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1124341) Volume: 1.00000 mL <== Derived from 07 (862 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 350.1 2	29	1123008	06/10/2024	1124055	06/14/2024
EPA 351.2 minus EPA 350.1			06/19/2024		06/19/2024
SM 2540 C-2015	01	1123493	06/11/2024	1123493	06/11/2024
EPA 351.2 2	28	1122995	06/10/2024	1123329	06/11/2024

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Sample	Sample ID	Taken	Time	Received
2305623	WW - Retention Pond	06/06/2024	13:30:00	06/07/2024

- Bottle 01 Polyethylene 1/2 gal (White)
Bottle 02 Polyethylene Quart
Bottle 03 Amber 32 Oz
Bottle 04 Amber 32 Oz
Bottle 05 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 06 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 07 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 08 16 oz HNO3 Metals Plastic
Bottle 09 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 10 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 11 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 12 Cr+6 Preserved 250 Polyethylene
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
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Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122859) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 21 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 22 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
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Bottle 24 BOD Titration Beaker A (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 25 BOD Analytical Beaker B (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 26 BOD Titration Beaker A (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
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Bottle 29 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1123008) Volume: 6.00000 mL <== Derived from 14 (6 ml)
Bottle 30 Prepared Bottle: Mercury Preparation for Metals (Batch 1123013) Volume: 50.00000 mL <== Derived from 08 (25 ml)
Bottle 31 Prepared Bottle: ICP Preparation for Metals (Batch 1123060) Volume: 50.00000 mL <== Derived from 08 (50 ml)
Bottle 32 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1123138) Volume: 10.00000 mL <== Derived from 03 (1025 ml)
Bottle 33 Prepared Bottle: 2 mL Autosampler Vial (Batch 1123370) Volume: 1.00000 mL <== Derived from 04 (939 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1124341) Volume: 1.00000 mL <== Derived from 07 (862 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 5310 C-2014	09	1124581	06/18/2024	1124581	06/18/2024
SM 4500-P E-2011	13	1123135	06/10/2024	1123135	06/10/2024
SM 2540 D-2015	01	1123475	06/11/2024	1123475	06/11/2024
SM 2130 B-2011	02	1123697	06/11/2024	1123697	06/11/2024

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Sample	Sample ID	Taken	Time	Received
2305623	WW - Retention Pond	06/06/2024	13:30:00	06/07/2024

- Bottle 01 Polyethylene 1/2 gal (White)
Bottle 02 Polyethylene Quart
Bottle 03 Amber 32 Oz
Bottle 04 Amber 32 Oz
Bottle 05 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 06 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 07 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 08 16 oz HNO3 Metals Plastic
Bottle 09 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid(4)
Bottle 10 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 11 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 12 Cr+6 Preserved 250 Polyethylene
Bottle 13 8 oz Plastic H2SO4 pH < 2
Bottle 14 8 oz Plastic H2SO4 pH < 2
Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 17 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 18 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 19 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122859) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 21 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 22 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1122879) Volume: 10.00000 mL <== Derived from 11 (5 ml)
Bottle 24 BOD Titration Beaker A (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 25 BOD Analytical Beaker B (Batch 1122944) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 26 BOD Titration Beaker A (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 27 BOD Analytical Beaker B (Batch 1122943) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 28 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1122995) Volume: 20.00000 mL <== Derived from 14 (20 ml)
Bottle 29 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1123008) Volume: 6.00000 mL <== Derived from 14 (6 ml)
Bottle 30 Prepared Bottle: Mercury Preparation for Metals (Batch 1123013) Volume: 50.00000 mL <== Derived from 08 (25 ml)
Bottle 31 Prepared Bottle: ICP Preparation for Metals (Batch 1123060) Volume: 50.00000 mL <== Derived from 08 (50 ml)
Bottle 32 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1123138) Volume: 10.00000 mL <== Derived from 03 (1025 ml)
Bottle 33 Prepared Bottle: 2 mL Autosampler Vial (Batch 1123370) Volume: 1.00000 mL <== Derived from 04 (939 ml)
Bottle 34 Prepared Bottle: 2 mL Autosampler Vial (Batch 1124341) Volume: 1.00000 mL <== Derived from 07 (862 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
SM 2550 B - 2010		1123056	06/06/2024	1123056	06/06/2024
EPA 1664B	05	1123989	06/14/2024	1123989	06/14/2024
SM 4500-H+ B-2011		1122812	06/06/2024	1122812	06/06/2024

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SPAC-R

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RESULTS

Sample Results

2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACEX
13:30:00

PO: 2305623-5

		Prepared:	06/24/2024	15:50:00	Analyzed	06/24/2024	15:50:00	WJP
Parameter		Results	Units	RL	Flags	CAS		Bottle
z	Check Limits	Completed						
		Prepared:	1122810	06/06/2024	13:30:00	Analyzed	1122810	06/06/2024
								13:30:00
								RDL
Parameter		Results	Units	RL	Flags	CAS		Bottle
z	Field Cl2 Check for CNa	NEG						
		Prepared:	1122813	06/06/2024	13:30:00	Analyzed	1122813	06/06/2024
								13:30:00
								RDL
Parameter		Results	Units	RL	Flags	CAS		Bottle
z	Field Sulfide Check for CNa	NEG	mg/L					
ASTM D7065-11		Prepared:	1124341	06/17/2024	14:40:00	Analyzed	1124948	06/19/2024
								19:32:00
								DWL
Parameter		Results	Units	RL	Flags	CAS		Bottle
z	Nonylphenol	<34.8	ug/L	34.8	SD	25154-52-3		34
Calculation		Prepared:	06/19/2024	11:10:05	Calculated	06/19/2024	11:10:05	CAL
Parameter		Results	Units	RL	Flags	CAS		Bottle
NELAC	Trivalent Chromium	<0.003	mg/L	0.003		16065-83-1		
EPA 1664B		Prepared:	1123989	06/14/2024	11:25:00	Analyzed	1123989	06/14/2024
								11:25:00
								RC1
Parameter		Results	Units	RL	Flags	CAS		Bottle
NELAC	Oil and Grease (HEM)	<4.60	mg/L	4.60				05
EPA 200.7 4.4		Prepared:	1123060	06/10/2024	07:00:00	Analyzed	1123677	06/12/2024
								12:42:00
								KB1
Parameter		Results	Units	RL	Flags	CAS		Bottle
NELAC	Calcium	72.7	mg/L	0.500		7440-70-2		31



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2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACE X
13:30:00

PO: 2305623-5

EPA 200.7 4.4 Prepared: 1123060 06/10/2024 07:00:00 Analyzed 1123677 06/12/2024 12:42:00 KB1

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Iron, Total	0.199	mg/L	0.025		7439-89-6	31

EPA 200.8 5.4 Prepared: 1123060 06/10/2024 07:00:00 Analyzed 1123439 06/11/2024 15:17:00 JC2

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Antimony, Total	0.00112	mg/L	0.003	J	7440-36-0	31
NELAC	Barium, Total	0.085	mg/L	0.005		7440-39-3	31
NELAC	Lead, Total	<0.0005	mg/L	0.0005		7439-92-1	31
NELAC	Manganese, Total	0.0163	mg/L	0.001		7439-96-5	31
NELAC	Selenium, Total	<0.00294	mg/L	0.00294		7782-49-2	31

EPA 200.8 5.4 Prepared: 1123060 06/10/2024 07:00:00 Analyzed 1124795 06/19/2024 11:43:00 JC2

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Thallium, Total	0.000616	mg/L	0.0005		7440-28-0	31

EPA 200.8 5.4 Prepared: 1123138 06/10/2024 14:30:00 Analyzed 1123222 06/10/2024 18:53:00 JC2

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Aluminum, Total	0.00615	mg/L	0.0000167		7429-90-5	32
NELAC	Arsenic, Total	0.0000169	mg/L	0.00000976		7440-38-2	32
NELAC	Beryllium, Total	<0.00000136	mg/L	0.00000136		7440-41-7	32
NELAC	Cadmium, Total	<0.00000065	mg/L	0.00000065		7440-43-9	32
NELAC	Chromium, Total	0.000282	mg/L	0.00000976		7440-47-3	32
NELAC	Copper, Total	0.0000747	mg/L	0.0000151		7440-50-8	32
NELAC	Nickel, Total	0.0000224	mg/L	0.0000109		7440-02-0	32
NELAC	Silver, Total	<0.0000022	mg/L	0.0000022		7440-22-4	32
NELAC	Zinc, Total	0.0043	mg/L	0.00000976		7440-66-6	32

EPA 245.1 3 Prepared: 1123013 06/10/2024 06:30:00 Analyzed 1123073 06/10/2024 11:34:00 KB1

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Mercury, Total	0.139	ug/L	0.200	J	7439-97-6	30

EPA 300.0 2.1 Prepared: 1123092 06/07/2024 16:05:00 Analyzed 1123092 06/07/2024 16:05:00 NAZ

	Parameter	Results	Units	RL	Flags	CAS	Bottle



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SPAC-R

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2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACE X
13:30:00

PO: 2305623-5

EPA 300.0 2.1 Prepared: 1123092 06/07/2024 16:05:00 Analyzed 1123092 06/07/2024 16:05:00 NAZ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Chloride	197	mg/L	3.00			01
NELAC	Fluoride	1.24	mg/L	1.00			01
NELAC	Nitrate-Nitrogen Total	1.20	mg/L	0.226		14797-55-8	01

EPA 300.0 2.1 Prepared: 1124447 06/18/2024 03:37:00 Analyzed 1124447 06/18/2024 03:37:00 NAZ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Sulfate	281	mg/L	30.0			01

EPA 350.1 2 Prepared: 1123008 06/10/2024 08:49:19 Analyzed 1124055 06/14/2024 08:53:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Ammonia Nitrogen	0.211	mg/L	0.020			29

EPA 351.2 2 Prepared: 1122995 06/10/2024 08:02:43 Analyzed 1123329 06/11/2024 10:29:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Kjeldahl Nitrogen	0.372	mg/L	0.050		7727-37-9	28

EPA 351.2 minus EPA 350.1 Prepared: 06/19/2024 11:10:05 Calculated 06/19/2024 11:10:05 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
z	Nitrogen, Total Organic (as N)	0.161	mg/L	0.050			

EPA 608.3 Prepared: 1123138 06/10/2024 14:30:00 Analyzed 1123853 06/13/2024 04:55:00 KAP

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	PCB-1016	<0.197	ug/L	0.197		12674-11-2	32
NELAC	PCB-1221	<0.195	ug/L	0.195		11104-28-2	32
NELAC	PCB-1232	<0.195	ug/L	0.195		11141-16-5	32
NELAC	PCB-1242	<0.195	ug/L	0.195		53469-21-9	32
NELAC	PCB-1248	<0.195	ug/L	0.195		12672-29-6	32
NELAC	PCB-1254	<0.195	ug/L	0.195		11097-69-1	32
NELAC	PCB-1260	<0.195	ug/L	0.195		11096-82-5	32
NELAC	PCB-1262	<0.195	ug/L	0.195		37324-23-5	32
NELAC	PCB-1268	<0.195	ug/L	0.195		11100-14-4	32



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SPACE X
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1106094

Printed: 06/26/2024

2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACE X
13:30:00

PO: 2305623-5

EPA 624.1 Prepared: 1123030 06/07/2024 16:19:00 Analyzed 1123030 06/07/2024 16:19:00 MRI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	1,1,1-Trichloroethane	<1.00	ug/L	1.00		71-55-6	16
NELAC	1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00		79-34-5	16
NELAC	1,1,2-Trichloroethane	<1.00	ug/L	1.00		79-00-5	16
NELAC	1,1-Dichloroethane	<1.00	ug/L	1.00		75-34-3	16
NELAC	1,1-Dichloroethylene	<1.00	ug/L	1.00		75-35-4	16
NELAC	1,2-Dibromoethane (EDB)	<1.00	ug/L	1.00		106-93-4	16
NELAC	1,2-Dichloroethane	<1.00	ug/L	1.00		107-06-2	16
NELAC	1,2-Dichloropropane	<1.00	ug/L	1.00		78-87-5	16
NELAC	2-Chloroethylvinyl ether	<1.00	ug/L	1.00		110-75-8	16
NELAC	Benzene	<1.00	ug/L	1.00		71-43-2	16
NELAC	Bromodichloromethane	<1.00	ug/L	1.00		75-27-4	16
NELAC	Bromoform	<1.00	ug/L	1.00		75-25-2	16
NELAC	Bromomethane (Methyl Bromi	<1.00	ug/L	1.00		74-83-9	16
NELAC	Carbon Tetrachloride	<1.00	ug/L	1.00		56-23-5	16
NELAC	Chlorobenzene	<1.00	ug/L	1.00		108-90-7	16
NELAC	Chloroethane	<1.12	ug/L	1.12		75-00-3	16
NELAC	Chloroform	<1.00	ug/L	1.00		67-66-3	16
NELAC	Chloromethane (Methyl Chloride)	<1.00	ug/L	1.00		74-87-3	16
NELAC	cis-1,3-Dichloropropene	<1.00	ug/L	1.00		10061-01-5	16
NELAC	Dibromochloromethane	<1.00	ug/L	1.00		124-48- 1	16
NELAC	Dichloromethane	<1.02	ug/L	1.02		75-09-2	16
NELAC	Ethylbenzene	<1.00	ug/L	1.00		100-41-4	16
NELAC	m-Dichlorobenzene (1,3-DCB)	<1.00	ug/L	1.00		541-73-1	16
NELAC	Methyl ethyl ketone (Butanone)	<1.00	ug/L	1.00		78-93-3	16
NELAC	o-Dichlorobenzene (1,2-DCB)	<1.00	ug/L	1.00		95-50-1	16
NELAC	p-Dichlorobenzene (1,4-DCB)	<1.00	ug/L	1.00		106-46-7	16
NELAC	Tetrachloroethylene	<1.00	ug/L	1.00		127-18-4	16
NELAC	Toluene	<1.00	ug/L	1.00		108-88-3	16
NELAC	trans-1,2-Dichloroethylene	<1.00	ug/L	1.00		156-60-5	16
NELAC	trans-1,3-Dichloropropene	<1.00	ug/L	1.00		10061-02-6	16
NELAC	Trichloroethylene	<1.00	ug/L	1.00		79-01-6	16
NELAC	Vinyl chloride	<1.00	ug/L	1.00		75-01-4	16

EPA 624.1 Prepared: 1123030 06/19/2024 11:10:05 Calculated 1123030 06/19/2024 11:10:05 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Trihalomethanes	<0.001	mg/L	0.001			16



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SPACE X
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1106094

Printed: 06/26/2024

2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACE X
13:30:00

PO: 2305623-5

EPA 624.1 Prepared: 1123033 06/07/2024 15:11:00 Analyzed 1123033 06/07/2024 15:11:00 MRI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Acrolein	<4.00	ug/L	4.00	X	107-02-8	19
NELAC	Acrylonitrile	<1.00	ug/L	1.00		107-13-1	19

EPA 625.1 Prepared: 1123370 06/11/2024 15:15:00 Analyzed 1125008 06/18/2024 18:25:00 PMI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	1,2,4,5-Tetrachlorobenzene	<1.10	ug/L	1.10		95-94-3	33
NELAC	1,2,4-Trichlorobenzene	<1.06	ug/L	1.06		120-82-1	33
NELAC	1,2-Dichlorobenzene	<5.32	ug/L	5.32		95-50-1	33
NELAC	1,2-DPH (as azobenzene)	<1.06	ug/L	1.06		122-66-7	33
NELAC	1,3-Dichlorobenzene	<5.32	ug/L	5.32		541-73-1	33
NELAC	1,4-Dichlorobenzene	<5.32	ug/L	5.32		106-46-7	33
NELAC	2,4,5-Trichlorophenol	<5.32	ug/L	5.32		95-95-4	33
NELAC	2,4,6-Trichlorophenol	<2.13	ug/L	2.13		88-06-2	33
NELAC	2,4-Dichlorophenol	<1.06	ug/L	1.06		120-83-2	33
NELAC	2,4-Dimethylphenol	<1.06	ug/L	1.06		105-67-9	33
NELAC	2,4-Dinitrophenol	<2.13	ug/L	2.13		51-28-5	33
NELAC	2,4-Dinitrotoluene	<2.13	ug/L	2.13		121-14-2	33
NELAC	2,6-Dinitrotoluene	<2.13	ug/L	2.13		606-20-2	33
NELAC	2-Chloronaphthalene	<1.06	ug/L	1.06		91-58-7	33
NELAC	2-Chlorophenol	<1.06	ug/L	1.06		95-57-8	33
NELAC	2-Methylphenol (o-Cresol)	<10.0	ug/L	10.0		95-48-7	33
NELAC	2-Nitrophenol	<1.06	ug/L	1.06		88-75-5	33
NELAC	3&4-Methylphenol (m&p-Cresol)	<8.52	ug/L	8.52		MEPH34	33
NELAC	3,3'-Dichlorobenzidine	<2.13	ug/L	2.13		91-94-1	33
NELAC	4,6-Dinitro-2-methylphenol	<2.13	ug/L	2.13		534-52-1	33
NELAC	4-Bromophenyl phenyl ether	<1.06	ug/L	1.06		101-55-3	33
NELAC	4-Chlorophenyl phenyl ethe	<1.06	ug/L	1.06		7005-72-3	33
NELAC	4-Nitrophenol	<1.06	ug/L	1.06		100-02-7	33
NELAC	Acenaphthene	<1.06	ug/L	1.06		83-32-9	33
NELAC	Acenaphthylene	<1.06	ug/L	1.06		208-96-8	33
z	Aniline	<2.63	ug/L	2.63	S	62-53-3	33
NELAC	Anthracene	<1.06	ug/L	1.06		120-12-7	33
NELAC	Benzidine	<1.60	ug/L	1.60	D	92-87-5	33
NELAC	Benzo(a)anthracene	<1.06	ug/L	1.06		56-55-3	33
NELAC	Benzo(a)pyrene	<1.06	ug/L	1.06		50-32-8	33



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SPAC-R

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SPACE X
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1106094

Printed: 06/26/2024

2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACE X
13:30:00

PO: 2305623-5

EPA 625.1 Prepared: 1123370 06/11/2024 15:15:00 Analyzed 1125008 06/18/2024 18:25:00 PMI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Benzo(b)fluoranthene	<1.06	ug/L	1.06		205-99-2	33
NELAC	Benzo(ghi)perylene	<1.06	ug/L	1.06		191-24-2	33
NELAC	Benzo(k)fluoranthene	<1.06	ug/L	1.06		207-08-9	33
NELAC	Benzyl Butyl phthalate	<7.99	ug/L	7.99		85-68-7	33
NELAC	Bis(2-chloroethoxy)methane	<1.06	ug/L	1.06		111-91-1	33
NELAC	Bis(2-chloroethyl)ether	<1.06	ug/L	1.06		111-44-4	33
NELAC	Bis(2-chloroisopropyl)ether	<1.06	ug/L	1.06		108-60-1	33
NELAC	Bis(2-ethylhexyl)phthalate	<7.99	ug/L	7.99		117-81-7	33
NELAC	Chrysene (Benzo(a)phenanthrene)	<1.06	ug/L	1.06		218-01-9	33
NELAC	Dibenz(a,h)anthracene	<1.06	ug/L	1.06		53-70-3	33
NELAC	Diethyl phthalate	<6.07	ug/L	6.07		84-66-2	33
NELAC	Dimethyl phthalate	<5.11	ug/L	5.11		131-11-3	33
NELAC	Di-n-butylphthalate	<7.99	ug/L	7.99		84-74-2	33
NELAC	Di-n-octylphthalate	<2.13	ug/L	2.13	X	117-84-0	33
NELAC	Fluoranthene(Benzo(j,k)fluorene)	<1.06	ug/L	1.06		206-44-0	33
NELAC	Fluorene	<1.06	ug/L	1.06		86-73-7	33
NELAC	Hexachlorobenzene	<1.06	ug/L	1.06		118-74-1	33
NELAC	Hexachlorobutadiene	<1.10	ug/L	1.10		87-68-3	33
NELAC	Hexachlorocyclopentadiene	<1.06	ug/L	1.06		77-47-4	33
NELAC	Hexachloroethane	<2.13	ug/L	2.13		67-72-1	33
NELAC	Indeno(1,2,3-cd)pyrene	<1.06	ug/L	1.06		193-39-5	33
NELAC	Isophorone	<1.06	ug/L	1.06		78-59-1	33
NELAC	Naphthalene	<1.06	ug/L	1.06		91-20-3	33
NELAC	Nitrobenzene	<1.06	ug/L	1.06		98-95-3	33
NELAC	n-Nitrosodiethylamine	<1.06	ug/L	1.06		55-18-5	33
NELAC	N-Nitrosodimethylamine	<1.06	ug/L	1.06		62-75-9	33
NELAC	n-Nitroso-di-n-butylamine	<1.06	ug/L	1.06		924-16-3	33
NELAC	N-Nitrosodi-n-propylamine	<1.06	ug/L	1.06		621-64-7	33
NELAC	N-Nitrosodiphenylamine (as DPA	<1.06	ug/L	1.06		86-30-6	33
NELAC	p-Chloro-m-Cresol (4-Chloro-3-me	<1.06	ug/L	1.06		59-50-7	33
NELAC	Pentachlorobenzene	<1.06	ug/L	1.06		608-93-5	33
NELAC	Pentachlorophenol	<5.00	ug/L	5.00		87-86-5	33
NELAC	Phenanthrene	<1.06	ug/L	1.06		85-01-8	33
NELAC	Phenol	<1.06	ug/L	1.06		108-95-2	33
NELAC	Pyrene	<1.06	ug/L	1.06		129-00-0	33
NELAC	Pyridine	<1.44	ug/L	1.44	X	110-86-1	33



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SPAC-R

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SPACE X
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1106094

Printed: 06/26/2024

2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACE X
13:30:00

PO: 2305623-5

EPA 625.1 Prepared: 1123370 06/11/2024 15:15:00 Calculated 1125008 06/21/2024 15:33:09 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cresols Total	<8.52	ug/L	8.52		1319-77-3, etc.	33

SM 2130 B-2011 Prepared: 1123697 06/11/2024 15:25:00 Analyzed 1123697 06/11/2024 15:25:00 TRC

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Turbidity	3.04	NTU	0.300	H		02

SM 2320 B-2011 Prepared: 1123173 06/10/2024 11:06:00 Analyzed 1123173 06/10/2024 11:06:00 KNI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Alkalinity (as CaCO3)	106	mg/L	1.00			01

SM 2540 C-2015 Prepared: 1123493 06/11/2024 08:00:00 Analyzed 1123493 06/11/2024 08:00:00 JMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Dissolved Solids	800	mg/L	50.0			01

SM 2540 D-2015 Prepared: 1123475 06/11/2024 14:00:00 Analyzed 1123475 06/11/2024 14:00:00 ADR

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Suspended Solids	7.10	mg/L	2.00			01

SM 2550 B - 2010 Prepared: 1123056 06/06/2024 13:30:00 Analyzed 1123056 06/06/2024 13:30:00 RDL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Temperature (onsite)	38	Degrees C	1			

SM 3500-Cr B-2011 Prepared: 1122789 06/06/2024 13:30:00 Analyzed 1122789 06/06/2024 13:30:00 RDL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Hex Cr, Field Preservation	Preserved	ug/L	3		18540-29-9	

SM 3500-Cr B-2011 Prepared: 1122852 06/07/2024 11:45:00 Analyzed 1122852 06/07/2024 11:45:00 ALB

	Parameter	Results	Units	RL	Flags	CAS	Bottle



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SPAC-R

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SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1106094

Printed: 06/26/2024

2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACEX
13:30:00

PO: 2305623-5

SM 3500-Cr B-2011 Prepared: 1122852 06/07/2024 11:45:00 Analyzed 1122852 06/07/2024 11:45:00 ALB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Hexavalent Chromium	25.9	ug/L	3.00		18540-29-9	12

SM 4500-Cl G-2011 Prepared: 1122809 06/06/2024 13:30:00 Analyzed 1122809 06/06/2024 13:30:00 RDL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cl2 Res.,Total(Onsite)Spec Mid	0.00	mg/L	0.05			

SM 4500-CN⁻ E-2016 Prepared: 1122859 06/07/2024 13:58:40 Analyzed 1123105 06/10/2024 09:44:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cyanide, total	0.0034	mg/L	0.005	J		20

SM 4500-CN⁻ G-2016 Prepared: 06/19/2024 11:10:05 Calculated 06/19/2024 11:10:05 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cyanide - Available/Amenable	0.00102	mg/L	0.005	J		

SM 4500-CN⁻ G-2016 Prepared: 1122879 06/07/2024 15:00:00 Analyzed 1123107 06/10/2024 09:44:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cyanide After Chlorination	<0.00238	mg/L	0.00238			21

SM 4500-H+ B-2011 Prepared: 1122812 06/06/2024 13:30:00 Analyzed 1122812 06/06/2024 13:30:00 RDL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	pH (Onsite)	8.6	SU				

SM 4500-O G-2016 Prepared: 1122811 06/06/2024 13:30:00 Analyzed 1122811 06/06/2024 13:30:00 RDL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Dissolved Oxygen Onsite	7.1	mg/L	1.0			

SM 4500-P E-2011 Prepared: 1123135 06/10/2024 09:45:00 Analyzed 1123135 06/10/2024 09:45:00 LR3

	Parameter	Results	Units	RL	Flags	CAS	Bottle



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SPAC-R

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SPACE X
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1106094

Printed: 06/26/2024

2305623 WW - Retention Pond

Received: 06/07/2024

Non-Potable Water

Collected by: Client
Taken: 06/06/2024

SPACE X
13:30:00

PO: 2305623-5

SM 4500-P E-2011 Prepared: 1123135 06/10/2024 09:45:00 Analyzed 1123135 06/10/2024 09:45:00 LR3

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Phosphorus (as P), total	0.017	mg/L	0.030		7723-14-0	13

SM 5210 B-2016 Prepared: 1122943 06/08/2024 Analyzed 1122943 06/13/2024 14:30:55 JW1

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Biochemical Oxygen Demand (BOD5)	3.56	mg/L	2.00		1026-3	01

SM 5210 B-2016 (TCMP Inhibitor) Prepared: 1122944 06/08/2024 Analyzed 1122944 06/13/2024 14:06:55 JW1

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	BOD Carbonaceous	<2.00	mg/L	2.00			01

SM 5220 D-2011 Prepared: 1123591 06/12/2024 14:00:00 Analyzed 1123591 06/12/2024 14:00:00 SRJ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Chemical Oxygen Demand	<20.0	mg/L	20.0			14

SM 5310 C-2014 Prepared: 1124581 06/18/2024 17:34:00 Analyzed 1124581 06/18/2024 17:34:00 MAG

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Organic Carbon	3.61	mg/L	0.500			09

Sample Preparation

2305623 WW - Retention Pond

Received: 06/07/2024

2305623-5

06/06/2024

Prepared: 12/31/1899 12:11:02 Calculated 12:11:02 CAL

Environmental Fee (per Project)

Verified



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SPAC-R

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SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1106094

Printed: 06/26/2024

2305623 WW - Retention Pond

Received: 06/07/2024
2305623-5

06/06/2024

ASTM D7065-11		Prepared:	1124341	06/17/2024	14:40:00	Analyzed	1124948	06/19/2024	19:32:00	DWL
z	Nonyl Phenol Expansion	Entered								34
EPA 200.2 2.8		Prepared:	1123060	06/10/2024	07:00:00	Analyzed	1123060	06/10/2024	07:00:00	HLT
z	Liquid Metals Digestion	50/50	ml							08
EPA 245.1 3		Prepared:	1123013	06/10/2024	06:30:00	Analyzed	1123013	06/10/2024	06:30:00	HLT
NELAC	Mercury Liquid Metals Digestion	50/25	ml							08
EPA 350.2, Rev. 2.0		Prepared:	1123008	06/10/2024	08:49:19	Analyzed	1123008	06/10/2024	08:49:19	MEG
NELAC	Ammonia Distillation	6/6	ml							14
EPA 351.2, Rev 2.0		Prepared:	1122995	06/10/2024	08:02:43	Analyzed	1122995	06/10/2024	08:02:43	MEG
NELAC	TKN Block Digestion	20/20	ml							14
EPA 608.3		Prepared:	1123138	06/10/2024	14:30:00	Analyzed	1123138	06/10/2024	14:30:00	CRS
PCB Liq-Liq Extr. W/Hex Exch.		10/1025	ml							03
EPA 608.3		Prepared:	1123138	06/10/2024	14:30:00	Analyzed	1123853	06/13/2024	04:55:00	KAP
NELAC	Polychlorinated Biphenyls	Entered								32
EPA 624.1		Prepared:	1123030	06/07/2024	16:19:00	Analyzed	1123030	06/07/2024	16:19:00	MRI



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SPAC-R

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SPACE X
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Printed: 06/26/2024

2305623 WW - Retention Pond

Received: 06/07/2024

2305623-5

06/06/2024

EPA 624.1 Prepared: 1123030 06/07/2024 16:19:00 Analyzed 1123030 06/07/2024 16:19:00 MRI

Table D-1/D-2 Volatile Expansion

Entered

16

EPA 624.1 Prepared: 1123033 06/07/2024 15:11:00 Analyzed 1123033 06/07/2024 15:11:00 MRI

Acrolein/Acrylonitrile Exp.

Entered

19

EPA 625.1 Prepared: 1123370 06/11/2024 15:15:00 Analyzed 1123370 06/11/2024 15:15:00 CRS

Liquid-Liquid Extraction, BNA

1/939

ml

04

EPA 625.1 Prepared: 1123370 06/11/2024 15:15:00 Analyzed 1125008 06/18/2024 18:25:00 PMI

Table D-1/ D-2 Semivolatiles Exp

Entered

33

EPA 625.1 Prepared: 1124341 06/17/2024 14:40:00 Analyzed 1124341 06/17/2024 14:40:00 MCC

Nonylphenol Liq-Liq Extract

1/862

ml

07

SM 2540 C-2015 Prepared: 1123231 06/11/2024 08:00:00 Analyzed 1123231 06/11/2024 08:00:00 JMB

Total Dissolved Solids Started

Started

SM 2540 D-2011 Prepared: 1123240 06/11/2024 14:00:00 Analyzed 1123240 06/11/2024 14:00:00 ADR

TSS Set Started

Started

SM 4500-CN⁻ C-2016 Prepared: 1122859 06/07/2024 13:58:40 Analyzed 1122859 06/07/2024 13:58:40 SRJ

Cyanide Distillation

10/5

ml

11



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SPAC-R

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2305623 WW - Retention Pond

Received: 06/07/2024
 2305623-5

06/06/2024

SM 4500-CN⁻ C-2016 Prepared: 1122879 06/07/2024 15:00:00 Analyzed 1122879 06/07/2024 15:00:00 SRJ

NELAC CN Dist After Chlorination 10/5 ml 11

SM 5210 B-2016 Prepared: 1122943 06/08/2024 Analyzed 1122943 06/08/2024 06:36:35 JW1

NELAC BOD Set Started Started

SM 5210 B-2016 (TCMP Inhibitor) Prepared: 1122944 06/08/2024 Analyzed 1122944 06/08/2024 06:36:35 JW1

NELAC BODc Set Started Started

Qualifiers:

J - Analyte detected below quantitation limit
 H - Sample started outside recommended holding time
 S - Standard reads lower than desired
 D - Duplicate RPD was higher than expected
 X - Standard reads higher than desired.

We report results on an As Received (or Wet) basis unless marked Dry Weight.

Unless otherwise noted, testing was performed at SPL, Inc.- Kilgore laboratory which holds International, Federal, and state accreditations. Please see our Websites for details.

(N)ELAC - Covered in our NELAC scope of accreditation
 z -- Not covered by our NELAC scope of accreditation

These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of SPL Kilgore. Unless otherwise specified, these test results meet the requirements of NELAC.
 RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.



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Bill Peery, MS, VP Technical Services



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QUALITY CONTROL



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SPAC-R

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Analytical Set **1122943**

SM 5210 B-2016

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Biochemical Oxygen Demand (BOD5)	1122943	0.2	0.200	0.500	mg/L	126419820
Biochemical Oxygen Demand (BOD5)	1122943	0.3	0.200	0.500	mg/L	126419872
Biochemical Oxygen Demand (BOD5)	1122943	0.2	0.200	0.500	mg/L	126420032

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Biochemical Oxygen Demand (BOD5)	2305504	15.8	14.3	mg/L	9.97	30.0
Biochemical Oxygen Demand (BOD5)	2305617	151	164	mg/L	8.25	30.0
Biochemical Oxygen Demand (BOD5)	2305721	263	265	mg/L	0.758	30.0
Biochemical Oxygen Demand (BOD5)	2305836	6.55	6.91	mg/L	5.35	30.0
Biochemical Oxygen Demand (BOD5)	2305924	5.37	5.73	mg/L	6.49	30.0

Seed Drop

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Biochemical Oxygen Demand (BOD5)	1122943	1.15	0.200	0.500	mg/L	126419822
Biochemical Oxygen Demand (BOD5)	1122943	1.01	0.200	0.500	mg/L	126419874
Biochemical Oxygen Demand (BOD5)	1122943	1.07	0.200	0.500	mg/L	126420034

Standard

<u>Parameter</u>	<u>Sample</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Biochemical Oxygen Demand (BOD5)	229	198	mg/L	116	83.7 - 116		126419823
Biochemical Oxygen Demand (BOD5)	227	198	mg/L	115	83.7 - 116		126419875
Biochemical Oxygen Demand (BOD5)	219	198	mg/L	111	83.7 - 116		126420035

Analytical Set **1122944**

SM 5210 B-2016 (TCMP Inhibitor)

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
BOD Carbonaceous	1122944	0.2	0.200	0.500	mg/L	126419906

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
BOD Carbonaceous	2305514	7.74	6.54	mg/L	16.8	30.0
BOD Carbonaceous	2305784	3.68	2.68	mg/L	31.4	30.0

Seed Drop

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
BOD Carbonaceous	1122944	1.29	0.200	0.500	mg/L	126419908

Standard

<u>Parameter</u>	<u>Sample</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
BOD Carbonaceous	222	198	mg/L	112	83.7 - 116		126419909

Analytical Set **1123105**

SM 4500-CN⁻ E-2016

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>

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QUALITY CONTROL



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Blank											
<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>					
Cyanide, total	1122859	ND	0.00238	0.005	mg/L	126424626					
CCV											
<u>Parameter</u>		<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>				
Cyanide, total		0.513	0.500	mg/L	103	90.0 - 110	126424625				
Cyanide, total		0.516	0.500	mg/L	103	90.0 - 110	126424635				
Cyanide, total		0.512	0.500	mg/L	102	90.0 - 110	126424644				
Cyanide, total		0.514	0.500	mg/L	103	90.0 - 110	126424655				
Cyanide, total		0.549	0.500	mg/L	110	90.0 - 110	126424664				
Cyanide, total		0.518	0.500	mg/L	104	90.0 - 110	126424668				
Cyanide, total		0.516	0.500	mg/L	103	90.0 - 110	126424669				
Cyanide, total		0.518	0.500	mg/L	104	90.0 - 110	126424670				
Cyanide, total		0.519	0.500	mg/L	104	90.0 - 110	126424673				
Duplicate											
<u>Parameter</u>	<u>Sample</u>		<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>				
Cyanide, total	2305241		ND	ND	mg/L		20.0				
Cyanide, total	2305248		ND	ND	mg/L		20.0				
ICV											
<u>Parameter</u>		<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>				
Cyanide, total		0.200	0.200	mg/L	100	90.0 - 110	126424624				
LCS Dup											
<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>		<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Cyanide, total	1122859	0.362	0.361		0.400	90.0 - 110	90.5	90.2	mg/L	0.277	20.0
Mat. Spike											
<u>Parameter</u>	<u>Sample</u>	<u>Spike</u>	<u>Unknown</u>	<u>Known</u>	<u>Units</u>	<u>Recovery %</u>	<u>Limits %</u>	<u>File</u>			
Cyanide, total	2305241	0.356	ND	0.400	mg/L	89.0	90.0 - 110	126424631		*	
Cyanide, total	2305248	0.354	ND	0.400	mg/L	88.5	90.0 - 110	126424634		*	

Analytical Set 1123107

SM 4500-CN⁻ G-2016

Blank						
Parameter	PrepSet	Reading	MDL	MQL	Units	File
Cyanide After Chlorination	1122879	ND	0.00119	0.0025	mg/L	126424710
CCV						
Parameter	Reading	Known	Units	Recover%	Limits%	File
Cyanide After Chlorination	0.513	0.500	mg/L	103	90.0 - 110	126424705
Cyanide After Chlorination	0.516	0.500	mg/L	103	90.0 - 110	126424706
Cyanide After Chlorination	0.512	0.500	mg/L	102	90.0 - 110	126424707
Cyanide After Chlorination	0.514	0.500	mg/L	103	90.0 - 110	126424708
Cyanide After Chlorination	0.549	0.500	mg/L	110	90.0 - 110	126424709
Cyanide After Chlorination	0.518	0.500	mg/L	104	90.0 - 110	126424711
Cyanide After Chlorination	0.516	0.500	mg/L	103	90.0 - 110	126424718
Cyanide After Chlorination	0.518	0.500	mg/L	104	90.0 - 110	126424719

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Cyanide After Chlorination	0.519	0.500	mg/L	104	90.0 - 110	126424720

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Cyanide After Chlorination	2305623	ND	ND	mg/L		20.0

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Cyanide After Chlorination	0.200	0.200	mg/L	100	90.0 - 110	126424704

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Cyanide After Chlorination	1122879	0.180	0.180	0.200	90.0 - 110	90.0	90.0	mg/L	0	20.0

Mat. Spike

Parameter	Sample	Spike	Unknown	Known	Units	Recovery %	Limits %	File
Cyanide After Chlorination	2305623	0.365	0.0014	0.400	mg/L	91.2	90.0 - 110	126424716

Analytical Set

1123329

EPA 351.2 2

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Kjeldahl Nitrogen	1122995	ND	0.00712	0.050	mg/L	126430743

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Kjeldahl Nitrogen	5.41	5.00	mg/L	108	90.0 - 110	126430734
Total Kjeldahl Nitrogen	5.38	5.00	mg/L	108	90.0 - 110	126430735
Total Kjeldahl Nitrogen	5.50	5.00	mg/L	110	90.0 - 110	126430739
Total Kjeldahl Nitrogen	5.36	5.00	mg/L	107	90.0 - 110	126430750
Total Kjeldahl Nitrogen	5.43	5.00	mg/L	109	90.0 - 110	126430757

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Total Kjeldahl Nitrogen	2304918	7.46	7.58	mg/L	1.60	20.0
Total Kjeldahl Nitrogen	2304932	ND	ND	mg/L		20.0

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Kjeldahl Nitrogen	5.35	5.00	mg/L	107	90.0 - 110	126430733

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Total Kjeldahl Nitrogen	1122995	4.81	4.79	5.00	90.0 - 110	96.2	95.8	mg/L	0.417	20.0

Mat. Spike

Parameter	Sample	Spike	Unknown	Known	Units	Recovery %	Limits %	File
Total Kjeldahl Nitrogen	2304918	12.0	7.58	10.0	mg/L	44.2	80.0 - 120	126430742
Total Kjeldahl Nitrogen	2304932	-0.389	ND	5.00	mg/L	0	80.0 - 120	126430748

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Analytical Set

1124055

EPA 350.1 2

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Ammonia Nitrogen	1123008	ND	0.00336	0.020	mg/L	126449003

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Ammonia Nitrogen	2.14	2.00	mg/L	107	90.0 - 110	126449002
Ammonia Nitrogen	2.11	2.00	mg/L	106	90.0 - 110	126449011
Ammonia Nitrogen	2.17	2.00	mg/L	108	90.0 - 110	126449021
Ammonia Nitrogen	2.04	2.00	mg/L	102	90.0 - 110	126449029
Ammonia Nitrogen	2.07	2.00	mg/L	104	90.0 - 110	126449040
Ammonia Nitrogen	2.05	2.00	mg/L	102	90.0 - 110	126449051
Ammonia Nitrogen	2.03	2.00	mg/L	102	90.0 - 110	126449062
Ammonia Nitrogen	2.07	2.00	mg/L	104	90.0 - 110	126449071
Ammonia Nitrogen	2.04	2.00	mg/L	102	90.0 - 110	126449081
Ammonia Nitrogen	1.98	2.00	mg/L	99.0	90.0 - 110	126449091
Ammonia Nitrogen	2.04	2.00	mg/L	102	90.0 - 110	126449100
Ammonia Nitrogen	1.97	2.00	mg/L	98.5	90.0 - 110	126449111
Ammonia Nitrogen	2.00	2.00	mg/L	100	90.0 - 110	126449116

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Ammonia Nitrogen	2305608	0.077	0.081	mg/L	5.06	20.0
Ammonia Nitrogen	2305651	0.052	0.109	mg/L	70.8 *	20.0

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Ammonia Nitrogen	2.07	2.00	mg/L	104	90.0 - 110	126449001

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Ammonia Nitrogen	1123008	2.14	2.18	2.00	90.0 - 110	107	109	mg/L	1.85	20.0

Mat. Spike

Parameter	Sample	Spike	Unknown	Known	Units	Recovery %	Limits %	File
Ammonia Nitrogen	2305608	2.10	0.081	2.00	mg/L	101	80.0 - 120	126449008
Ammonia Nitrogen	2305651	2.10	0.109	2.00	mg/L	99.6	80.0 - 120	126449012

Analytical Set

1122809

SM 4500-CI G-2011

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Cl2 Res.,Total(Onsite)Spec Mid	2305628	NEGATT	NEGATIVE	mg/L		20

Analytical Set

1122810

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Field Cl2 Check for CNa	2305628	NEGATT	NEGATIVE			20

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Analytical Set **1122811**

SM 4500-O G-2016

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Dissolved Oxygen Onsite	2305628	6.6	6.5	mg/L	1.5	20

Analytical Set **1122812**

SM 4500-H+ B-2011

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
pH (Onsite)	6.0	6.0	SU	100	90 - 110	
pH (Onsite)	6.0	6.0	SU	100	90 - 110	

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
pH (Onsite)	2305628	8.2	8.1	SU	1.2	20

Standard

<u>Parameter</u>	<u>Sample</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
pH (Onsite)	1122812	8.1	8.0	SU	101.3	90 - 110	
pH (Onsite)	1122812	8.0	8.0	SU	100	90 - 110	

Analytical Set **1123056**

SM 2550 B - 2010

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Temperature (onsite)	2305628	38	39	Degrees C	2.6	20

Analytical Set **1123475**

SM 2540 D-2015

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MDL</u>	<u>Units</u>	<u>File</u>
Total Suspended Solids	1123475	ND	2	2	mg/L	126434412

ControlBlk

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MDL</u>	<u>Units</u>	<u>File</u>
Total Suspended Solids	1123475	-0.0001			grams	126434411

Duplicate

<u>Parameter</u>	<u>Sample</u>	<u>Result</u>	<u>Unknown</u>	<u>Unit</u>	<u>RPD</u>	<u>Limit%</u>
Total Suspended Solids	2305567	7210	7570	mg/L	4.87	20.0
Total Suspended Solids	2305644	793	653	mg/L	19.4	20.0
Total Suspended Solids	2305738	545	610	mg/L	11.3	20.0

LCS

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits</u>	<u>File</u>
Total Suspended Solids	1123475	53.0	50.0	mg/L	106	90.0 - 110	126434445

Standard

<u>Parameter</u>	<u>Sample</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Total Suspended Solids		96.0	100	mg/L	96.0	90.0 - 110	126434444

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Analytical Set 1123493

SM 2540 C-2015

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Dissolved Solids	1123493	ND	5.00	5.00	mg/L	126434809

ControlBlk

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Dissolved Solids	1123493	-0.0002			grams	126434796

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Total Dissolved Solids	2305623	800	800	mg/L	0	20.0

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File
Total Dissolved Solids	1123493	200	200	mg/L	100	85.0 - 115	126434810

Standard

Parameter	Sample	Reading	Known	Units	Recover%	Limits%	File
Total Dissolved Solids		104	100	mg/L	104	90.0 - 110	126434797

Analytical Set 1123989

EPA 1664B

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Oil and Grease (HEM)	1123989	ND	0.557	4.00	mg/L	126447630

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File
Oil and Grease (HEM)	1123989	37.1	40.0	mg/L	92.8	78.0 - 114	126447631

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Oil and Grease (HEM)	2305623	38.5	0	ND	40.0	78.0 - 114	96.2		mg/L		20.0

Analytical Set 1123092

EPA 300.0 2.1

AWRL/LOQ C

Parameter	Reading	Known	Units	Recover%	Limits%	File
Fluoride	0.129	0.100	mg/L	129	70.0 - 130	126424313
Nitrate-Nitrogen Total	0.0223	0.0226	mg/L	98.7	70.0 - 130	126424313

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Chloride	1123092	ND	0.0972	0.300	mg/L	126424314
Fluoride	1123092	ND	0.010	0.100	mg/L	126424314
Nitrate-Nitrogen Total	1123092	ND	0.00745	0.0226	mg/L	126424314

CCB

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Chloride	1123092	0.048	0.0972	0.300	mg/L	126424310

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SPAC-R

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Brownsville, TX 78521

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CCB

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Chloride	1123092	0.048	0.0972	0.300	mg/L	126424328
Chloride	1123092	0.045	0.0972	0.300	mg/L	126424342
Fluoride	1123092	0	0.010	0.100	mg/L	126424310
Fluoride	1123092	0	0.010	0.100	mg/L	126424328
Fluoride	1123092	0	0.010	0.100	mg/L	126424342
Nitrate-Nitrogen Total	1123092	0	0.00745	0.0226	mg/L	126424310
Nitrate-Nitrogen Total	1123092	0	0.00745	0.0226	mg/L	126424328
Nitrate-Nitrogen Total	1123092	0	0.00745	0.0226	mg/L	126424342

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Chloride	10.5	10.0	mg/L	105	90.0 - 110	126424309
Chloride	10.3	10.0	mg/L	103	90.0 - 110	126424327
Chloride	10.4	10.0	mg/L	104	90.0 - 110	126424341
Fluoride	9.96	10.0	mg/L	99.6	90.0 - 110	126424309
Fluoride	9.92	10.0	mg/L	99.2	90.0 - 110	126424327
Fluoride	9.99	10.0	mg/L	99.9	90.0 - 110	126424341
Nitrate-Nitrogen Total	2.27	2.26	mg/L	100	90.0 - 110	126424309
Nitrate-Nitrogen Total	2.26	2.26	mg/L	100	90.0 - 110	126424327
Nitrate-Nitrogen Total	2.27	2.26	mg/L	100	90.0 - 110	126424341

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Chloride	1123092	5.27	5.28	5.00	85.0 - 115	105	106	mg/L	0.190	20.0
Fluoride	1123092	5.11	5.17	5.00	88.0 - 120	102	103	mg/L	1.17	20.0
Nitrate-Nitrogen Total	1123092	1.18	1.19	1.13	88.0 - 116	104	105	mg/L	0.844	20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Chloride	2304482	1440	1410	1350	100	80.0 - 120	90.0	60.0 *	mg/L	40.0 *	20.0
Fluoride	2304482	87.4	87.6	ND	100	80.0 - 120	87.4	87.6	mg/L	0.229	20.0
Nitrate-Nitrogen Total	2304482	23.3	23.3	1.49	22.6	80.0 - 120	96.5	96.5	mg/L	0	20.0
Chloride	2304595	18.3	18.2	0.660	20.0	80.0 - 120	88.2	87.7	mg/L	0.569	20.0
Fluoride	2304595	18.1	17.2	ND	20.0	80.0 - 120	90.5	86.0	mg/L	5.10	20.0
Nitrate-Nitrogen Total	2304595	4.31	4.28	ND	4.52	80.0 - 120	95.4	94.7	mg/L	0.698	20.0

Analytical Set 1124447

EPA 300.0 2.1

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Sulfate	1124447	ND	0.254	0.300	mg/L	126459699

CCB

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Sulfate	1124447	0	0.254	0.300	mg/L	126459695
Sulfate	1124447	0	0.254	0.300	mg/L	126459717
Sulfate	1124447	0	0.254	0.300	mg/L	126459729

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Parameter	Reading	Known	Units	Recover%	Limits%	File
Sulfate	9.94	10.0	mg/L	99.4	90.0 - 110	126459694
Sulfate	10.1	10.0	mg/L	101	90.0 - 110	126459716
Sulfate	9.93	10.0	mg/L	99.3	90.0 - 110	126459728

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Sulfate	1124447	5.13	5.07	5.00	85.0 - 115	103	101	mg/L	1.18	20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Sulfate	2306972	1020	1020	944	100	80.0 - 120	76.0 *	76.0 *	mg/L	0	20.0
Sulfate	2307646	106	104	82.5	20.0	80.0 - 120	118	108	mg/L	8.89	20.0

Analytical Set 1122852

SM 3500-Cr B-2011

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Hexavalent Chromium	1122852	0.768	0.550	3.00	ug/L	126419252
Hexavalent Chromium	1122852	ND	0.550	3.00	ug/L	126419259
Hexavalent Chromium	1122852	0.768	0.550	3.00	ug/L	126419264

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Hexavalent Chromium	86.2	80.0	ug/L	108	90.0 - 110	126419253
Hexavalent Chromium	86.7	80.0	ug/L	108	90.0 - 110	126419260
Hexavalent Chromium	86.4	80.0	ug/L	108	90.0 - 110	126419265

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Hexavalent Chromium	1122852	85.7	85.9	80.0	85.0 - 115	107	107	ug/L	0.233	15.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Hexavalent Chromium	2304484	ND	ND	ND	80.0	70.0 - 130	0 *	0 *	ug/L		20.0

Analytical Set 1123073

EPA 245.1 3

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Mercury, Total	1123013	ND	0.113	0.200	ug/L	126424063

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Mercury, Total	5.18	5.000	ug/L	104	90.0 - 110	126424061
Mercury, Total	5.06	5.000	ug/L	101	90.0 - 110	126424062
Mercury, Total	5.10	5.000	ug/L	102	90.0 - 110	126424069
Mercury, Total	5.01	5.000	ug/L	100	90.0 - 110	126424074

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ICL

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Mercury, Total	20.5	20.00	ug/L	102	90.0 - 110	126424060

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Mercury, Total	4.86	5.000	ug/L	97.2	90.0 - 110	126424059

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Mercury, Total	1123013	8.55	8.69	10.0	85.0 - 115	85.5	86.9	ug/L	1.62	20.0

MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Mercury, Total	2305628	9.84	10.1	0.149	10.0	70.0 - 130	96.9	99.5	ug/L	2.65	20.0

Analytical Set

1123222

EPA 200.8 5.4

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Barium, Total	1123060	ND	0.000635	0.001	mg/L	126428091
Lead, Total	1123060	ND	0.000244	0.001	mg/L	126428091
Manganese, Total	1123060	ND	0.000118	0.001	mg/L	126428091
Thallium, Total	1123060	ND	0.000106	0.001	mg/L	126428091

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Aluminum, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126427991
Aluminum, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126427996
Aluminum, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126428000
Aluminum, Total	0.0519	0.05	mg/L	104	90.0 - 110	126428108
Aluminum, Total	0.0519	0.05	mg/L	104	90.0 - 110	126428115
Aluminum, Total	0.0529	0.05	mg/L	106	90.0 - 110	126428135
Aluminum, Total	0.0492	0.05	mg/L	98.4	90.0 - 110	126428137
Aluminum, Total	0.0507	0.05	mg/L	101	90.0 - 110	126428141
Arsenic, Total	0.0483	0.05	mg/L	96.6	90.0 - 110	126427976
Arsenic, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126427983
Arsenic, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126427986
Arsenic, Total	0.0476	0.05	mg/L	95.2	90.0 - 110	126427991
Arsenic, Total	0.0474	0.05	mg/L	94.8	90.0 - 110	126427996
Arsenic, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126428108
Arsenic, Total	0.0489	0.05	mg/L	97.8	90.0 - 110	126428115
Beryllium, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126428108
Beryllium, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126428115
Cadmium, Total	0.0492	0.05	mg/L	98.4	90.0 - 110	126427976
Cadmium, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126427983
Cadmium, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126427991
Cadmium, Total	0.0489	0.05	mg/L	97.8	90.0 - 110	126427996
Cadmium, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126428108

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Parameter	Reading	Known	Units	Recover%	Limits%	File
Cadmium, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126428115
Cadmium, Total	0.0488	0.05	mg/L	97.6	90.0 - 110	126428126
Cadmium, Total	0.0495	0.05	mg/L	99.0	90.0 - 110	126428130
Chromium, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126427976
Chromium, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126427983
Chromium, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126427986
Chromium, Total	0.0489	0.05	mg/L	97.8	90.0 - 110	126427991
Chromium, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126427996
Chromium, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126428000
Chromium, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126428108
Chromium, Total	0.050	0.05	mg/L	100	90.0 - 110	126428115
Chromium, Total	0.0495	0.05	mg/L	99.0	90.0 - 110	126428123
Chromium, Total	0.0487	0.05	mg/L	97.4	90.0 - 110	126428126
Chromium, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126428130
Chromium, Total	0.049	0.05	mg/L	98.0	90.0 - 110	126428132
Copper, Total	0.050	0.05	mg/L	100	90.0 - 110	126427976
Copper, Total	0.051	0.05	mg/L	102	90.0 - 110	126427983
Copper, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126427986
Copper, Total	0.0501	0.05	mg/L	100	90.0 - 110	126427991
Copper, Total	0.050	0.05	mg/L	100	90.0 - 110	126427996
Copper, Total	0.0504	0.05	mg/L	101	90.0 - 110	126428000
Copper, Total	0.051	0.05	mg/L	102	90.0 - 110	126428006
Copper, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126428014
Copper, Total	0.0507	0.05	mg/L	101	90.0 - 110	126428023
Copper, Total	0.0516	0.05	mg/L	103	90.0 - 110	126428033
Copper, Total	0.0502	0.05	mg/L	100	90.0 - 110	126428044
Copper, Total	0.0508	0.05	mg/L	102	90.0 - 110	126428055
Copper, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126428065
Copper, Total	0.0498	0.05	mg/L	99.6	90.0 - 110	126428076
Copper, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126428087
Copper, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126428097
Copper, Total	0.0502	0.05	mg/L	100	90.0 - 110	126428108
Copper, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126428115
Copper, Total	0.048	0.05	mg/L	96.0	90.0 - 110	126428123
Copper, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126428126
Copper, Total	0.0494	0.05	mg/L	98.8	90.0 - 110	126428130
Copper, Total	0.0489	0.05	mg/L	97.8	90.0 - 110	126428132
Copper, Total	0.0484	0.05	mg/L	96.8	90.0 - 110	126428133
Nickel, Total	0.048	0.05	mg/L	96.0	90.0 - 110	126427976
Nickel, Total	0.0482	0.05	mg/L	96.4	90.0 - 110	126427983
Nickel, Total	0.0481	0.05	mg/L	96.2	90.0 - 110	126427986
Nickel, Total	0.0479	0.05	mg/L	95.8	90.0 - 110	126427991
Nickel, Total	0.0485	0.05	mg/L	97.0	90.0 - 110	126427996
Nickel, Total	0.0485	0.05	mg/L	97.0	90.0 - 110	126428108
Nickel, Total	0.0483	0.05	mg/L	96.6	90.0 - 110	126428115

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Parameter	Reading	Known	Units	Recover%	Limits%	File
Nickel, Total	0.0473	0.05	mg/L	94.6	90.0 - 110	126428123
Nickel, Total	0.0473	0.05	mg/L	94.6	90.0 - 110	126428126
Silver, Total	0.0502	0.05	mg/L	100	90.0 - 110	126427976
Silver, Total	0.051	0.05	mg/L	102	90.0 - 110	126427983
Silver, Total	0.0509	0.05	mg/L	102	90.0 - 110	126427986
Silver, Total	0.0506	0.05	mg/L	101	90.0 - 110	126427991
Silver, Total	0.0508	0.05	mg/L	102	90.0 - 110	126427996
Silver, Total	0.0507	0.05	mg/L	101	90.0 - 110	126428000
Silver, Total	0.0505	0.05	mg/L	101	90.0 - 110	126428108
Silver, Total	0.051	0.05	mg/L	102	90.0 - 110	126428115
Silver, Total	0.0507	0.05	mg/L	101	90.0 - 110	126428123
Silver, Total	0.0499	0.05	mg/L	99.8	90.0 - 110	126428126
Silver, Total	0.0502	0.05	mg/L	100	90.0 - 110	126428130
Silver, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126428132
Silver, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126428133
Silver, Total	0.0496	0.05	mg/L	99.2	90.0 - 110	126428135
Zinc, Total	0.0492	0.05	mg/L	98.4	90.0 - 110	126427969
Zinc, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126427976
Zinc, Total	0.050	0.05	mg/L	100	90.0 - 110	126427983
Zinc, Total	0.0487	0.05	mg/L	97.4	90.0 - 110	126427986
Zinc, Total	0.0485	0.05	mg/L	97.0	90.0 - 110	126427991
Zinc, Total	0.0486	0.05	mg/L	97.2	90.0 - 110	126427996
Zinc, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126428108
Zinc, Total	0.049	0.05	mg/L	98.0	90.0 - 110	126428115
Zinc, Total	0.048	0.05	mg/L	96.0	90.0 - 110	126428123

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Aluminum, Total	0.0499	0.05	mg/L	99.8	90.0 - 110	126427964
Arsenic, Total	0.0484	0.05	mg/L	96.8	90.0 - 110	126427964
Beryllium, Total	0.0492	0.05	mg/L	98.4	90.0 - 110	126427964
Cadmium, Total	0.0497	0.05	mg/L	99.4	90.0 - 110	126427964
Chromium, Total	0.0499	0.05	mg/L	99.8	90.0 - 110	126427964
Copper, Total	0.0507	0.05	mg/L	101	90.0 - 110	126427964
Nickel, Total	0.0504	0.05	mg/L	101	90.0 - 110	126427964
Silver, Total	0.0515	0.05	mg/L	103	90.0 - 110	126427964
Zinc, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126427964

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Barium, Total	1123060	0.502	0.503	0.500	85.0 - 115	100	101	mg/L	0.199	20.0
Lead, Total	1123060	0.510	0.521	0.500	85.0 - 115	102	104	mg/L	2.13	20.0
Manganese, Total	1123060	0.488	0.489	0.500	85.0 - 115	97.6	97.8	mg/L	0.205	20.0
Thallium, Total	1123060	0.513	0.526	0.500	85.0 - 115	103	105	mg/L	2.50	20.0

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MRL Check

Parameter	Reading	Known	Units	Recover%	Limits%	File
Copper, Total	0.00102	0.001	mg/L	102	25.0 - 175	126427965

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Lead, Total	2305811	0.551	0.563	0.0438	0.500	70.0 - 130	101	104	mg/L	2.34	20.0
Barium, Total	2305911	0.515	0.517	0.017	0.500	70.0 - 130	99.6	100	mg/L	0.401	20.0
Manganese, Total	2305911	0.484	0.469	0.000754	0.500	70.0 - 130	96.6	93.6	mg/L	3.15	20.0
Thallium, Total	2305911	0.493	0.499	0.000227	0.500	70.0 - 130	98.6	99.8	mg/L	1.21	20.0

Analytical Set 1123439

EPA 200.8 5.4

Blank

Parameter	PrepSet	Reading	MDL	MDL	Units	File
Antimony, Total	1123060	ND	0.000847	0.003	mg/L	126432756
Barium, Total	1123060	ND	0.00207	0.005	mg/L	126432756
Lead, Total	1123060	ND	0.000549	0.001	mg/L	126432756
Manganese, Total	1123060	ND	0.000168	0.001	mg/L	126432756
Selenium, Total	1123060	ND	0.00294	0.005	mg/L	126432756
Thallium, Total	1123060	ND	0.000966	0.001	mg/L	126432756

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Antimony, Total	0.0499	0.05	mg/L	99.8	90.0 - 110	126432753
Antimony, Total	0.0493	0.05	mg/L	98.6	90.0 - 110	126432763
Antimony, Total	0.049	0.05	mg/L	98.0	90.0 - 110	126432770
Antimony, Total	0.0501	0.05	mg/L	100	90.0 - 110	126432779
Antimony, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126432792
Antimony, Total	0.0488	0.05	mg/L	97.6	90.0 - 110	126432799
Antimony, Total	0.0492	0.05	mg/L	98.4	90.0 - 110	126432809
Antimony, Total	0.0491	0.05	mg/L	98.2	90.0 - 110	126432816
Barium, Total	0.0512	0.05	mg/L	102	90.0 - 110	126432753
Barium, Total	0.051	0.05	mg/L	102	90.0 - 110	126432763
Lead, Total	0.0533	0.05	mg/L	107	90.0 - 110	126432739
Lead, Total	0.0543	0.05	mg/L	109	90.0 - 110	126432749
Lead, Total	0.0543	0.05	mg/L	109	90.0 - 110	126432753
Lead, Total	0.0534	0.05	mg/L	107	90.0 - 110	126432763
Manganese, Total	0.0539	0.05	mg/L	108	90.0 - 110	126432753
Manganese, Total	0.0523	0.05	mg/L	105	90.0 - 110	126432763
Manganese, Total	0.0545	0.05	mg/L	109	90.0 - 110	126432792
Manganese, Total	0.0518	0.05	mg/L	104	90.0 - 110	126432799
Manganese, Total	0.0525	0.05	mg/L	105	90.0 - 110	126432809
Manganese, Total	0.0518	0.05	mg/L	104	90.0 - 110	126432816
Selenium, Total	0.052	0.05	mg/L	104	90.0 - 110	126432739
Selenium, Total	0.0537	0.05	mg/L	107	90.0 - 110	126432749
Selenium, Total	0.0529	0.05	mg/L	106	90.0 - 110	126432753
Selenium, Total	0.0529	0.05	mg/L	106	90.0 - 110	126432763

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SPAC-R

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Selenium, Total	0.0521	0.05	mg/L	104	90.0 - 110	126432770
Selenium, Total	0.0528	0.05	mg/L	106	90.0 - 110	126432779

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Antimony, Total	0.0517	0.05	mg/L	103	90.0 - 110	126432734
Barium, Total	0.0522	0.05	mg/L	104	90.0 - 110	126432734
Lead, Total	0.0537	0.05	mg/L	107	90.0 - 110	126432734
Manganese, Total	0.0544	0.05	mg/L	109	90.0 - 110	126432734
Selenium, Total	0.0528	0.05	mg/L	106	90.0 - 110	126432734

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Antimony, Total	1123060	0.485	0.494	0.500	85.0 - 115	97.0	98.8	mg/L	1.84	20.0
Barium, Total	1123060	0.496	0.502	0.500	85.0 - 115	99.2	100	mg/L	1.20	20.0
Lead, Total	1123060	0.502	0.507	0.500	85.0 - 115	100	101	mg/L	0.991	20.0
Manganese, Total	1123060	0.521	0.531	0.500	85.0 - 115	104	106	mg/L	1.90	20.0
Selenium, Total	1123060	0.491	0.502	0.500	85.0 - 115	98.2	100	mg/L	2.22	20.0
Thallium, Total	1123060	0.496	0.504	0.500	85.0 - 115	99.2	101	mg/L	1.60	20.0

MRL Check

Parameter	Reading	Known	Units	Recover%	Limits%	File
Lead, Total	0.000969	0.001	mg/L	96.9	25.0 - 175	126432735
Manganese, Total	0.00104	0.001	mg/L	104	25.0 - 175	126432735

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Antimony, Total	2305811	0.490	0.481	ND	0.500	70.0 - 130	98.0	96.2	mg/L	1.85	20.0
Barium, Total	2305811	0.509	0.507	0.0167	0.500	70.0 - 130	98.5	98.1	mg/L	0.407	20.0
Lead, Total	2305811	0.441	0.433	ND	0.500	70.0 - 130	88.2	86.6	mg/L	1.83	20.0
Manganese, Total	2305811	0.457	0.444	0.000782	0.500	70.0 - 130	91.2	88.6	mg/L	2.89	20.0
Selenium, Total	2305811	0.468	0.458	ND	0.500	70.0 - 130	93.6	91.6	mg/L	2.16	20.0
Thallium, Total	2305811	0.445	0.439	ND	0.500	70.0 - 130	89.0	87.8	mg/L	1.36	20.0

Analytical Set

1123677

EPA 200.7 4.4

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Calcium	1123060	ND	0.0156	0.500	mg/L	126438124
Iron, Total	1123060	ND	0.00379	0.025	mg/L	126438124

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Calcium	25.3	25.0	mg/L	101	90.0 - 110	126438114
Calcium	24.9	25.0	mg/L	99.6	90.0 - 110	126438115
Calcium	24.8	25.0	mg/L	99.2	90.0 - 110	126438123
Calcium	24.8	25.0	mg/L	99.2	90.0 - 110	126438130

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CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Calcium	24.6	25.0	mg/L	98.4	90.0 - 110	126438136
Calcium	24.5	25.0	mg/L	98.0	90.0 - 110	126438145
Calcium	24.5	25.0	mg/L	98.0	90.0 - 110	126438154
Calcium	24.6	25.0	mg/L	98.4	90.0 - 110	126438164
Calcium	24.5	25.0	mg/L	98.0	90.0 - 110	126438172
Calcium	24.5	25.0	mg/L	98.0	90.0 - 110	126438179
Iron, Total	2.48	2.50	mg/L	99.2	90.0 - 110	126438114
Iron, Total	2.45	2.50	mg/L	98.0	90.0 - 110	126438115
Iron, Total	2.44	2.50	mg/L	97.6	90.0 - 110	126438123
Iron, Total	2.44	2.50	mg/L	97.6	90.0 - 110	126438130
Iron, Total	2.42	2.50	mg/L	96.8	90.0 - 110	126438136
Iron, Total	2.41	2.50	mg/L	96.4	90.0 - 110	126438145
Iron, Total	2.41	2.50	mg/L	96.4	90.0 - 110	126438154
Iron, Total	2.41	2.50	mg/L	96.4	90.0 - 110	126438164
Iron, Total	2.41	2.50	mg/L	96.4	90.0 - 110	126438172
Iron, Total	2.40	2.50	mg/L	96.0	90.0 - 110	126438179

ICL

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Calcium	49.7	50.0	mg/L	99.4	95.0 - 105	126438108
Iron, Total	4.77	5.00	mg/L	95.4	95.0 - 105	126438108

ICV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Calcium	24.8	25.0	mg/L	99.2	90.0 - 110	126438112
Iron, Total	2.46	2.50	mg/L	98.4	90.0 - 110	126438112

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Calcium	1123060	4.89	4.92	5.00	85.0 - 115	97.8	98.4	mg/L	0.612	25.0
Iron, Total	1123060	0.488	0.490	0.500	85.0 - 115	97.6	98.0	mg/L	0.409	25.0

LDR

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Calcium	96.9	100	mg/L	96.9	90.0 - 110	126438109
Iron, Total	9.75	10.0	mg/L	97.5	90.0 - 110	126438109

MRL Check

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Calcium	0.521	0.500	mg/L	104	25.0 - 175	126438113
Iron, Total	0.0538	0.050	mg/L	108	25.0 - 175	126438113

MSD

<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Calcium	2305811	31.1	31.8	27.1	5.00	75.0 - 125	80.0	94.0	mg/L	16.1	25.0
Iron, Total	2305811	0.497	0.503	0.00607	0.500	75.0 - 125	98.2	99.4	mg/L	1.21	25.0

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SPAC-R

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Project
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Analytical Set

1124581

SM 5310 C-2014

AWRL/LOQ C

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon	1.99	2.00	mg/L	99.5	50.0 - 150	126462988

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Organic Carbon	1124581	0.0901	0.0618	0.500	mg/L	126462987
Total Organic Carbon	1124581	ND	0.0618	0.500	mg/L	126462993
Total Organic Carbon	1124581	ND	0.0618	0.500	mg/L	126463008

CCB

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Organic Carbon	1124581	0.0848	0.0618	0.500	mg/L	126462981
Total Organic Carbon	1124581	0.0931	0.0618	0.500	mg/L	126462989
Total Organic Carbon	1124581	0.110	0.0618	0.500	mg/L	126463005
Total Organic Carbon	1124581	0.155	0.0618	0.500	mg/L	126463019

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon	10.2	10.0	mg/L	102	90.0 - 110	126462984
Total Organic Carbon	10.4	10.0	mg/L	104	90.0 - 110	126462991
Total Organic Carbon	10.5	10.0	mg/L	105	90.0 - 110	126463006
Total Organic Carbon	10.2	10.0	mg/L	102	90.0 - 110	126463020

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon	20.5	20.0	mg/L	102	90.0 - 110	126462983
Total Organic Carbon	20.3	20.0	mg/L	102	90.0 - 110	126462990

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon	10.1	10.0	mg/L	101	90.0 - 110	126462985
Total Organic Carbon	10.2	10.0	mg/L	102	90.0 - 110	126462992

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File
Total Organic Carbon	1124581	5.07	5.00	mg/L	101	85.0 - 115	126462986
Total Organic Carbon	1124581	5.22	5.00	mg/L	104	85.0 - 115	126462994
Total Organic Carbon	1124581	5.35	5.00	mg/L	107	85.0 - 115	126463007

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Total Organic Carbon	2306732	14.7	14.4	4.14	10.0	85.0 - 115	106	103	mg/L	2.88	20.0
Total Organic Carbon	2306796	14.4	14.5	3.74	10.0	85.0 - 115	107	108	mg/L	0.934	20.0

Standard

Parameter	Sample	Reading	Known	Units	Recover%	Limits%	File
Total Organic Carbon		48.4	50.0	mg/L	96.8	90.0 - 110	126462982

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SPAC-R

SPACEX
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Project
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Analytical Set

1124795

EPA 200.8 5.4

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Thallium, Total	1123060	ND	0.00025	0.0005	mg/L	126467375

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Thallium, Total	0.0476	0.05	mg/L	95.2	90.0 - 110	126467374
Thallium, Total	0.0474	0.05	mg/L	94.8	90.0 - 110	126467383
Thallium, Total	0.0509	0.05	mg/L	102	90.0 - 110	126467393
Thallium, Total	0.0474	0.05	mg/L	94.8	90.0 - 110	126467402
Thallium, Total	0.0456	0.05	mg/L	91.2	90.0 - 110	126467411

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Thallium, Total	0.0489	0.05	mg/L	97.8	90.0 - 110	126467360

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Thallium, Total	1123060	0.561	0.567	0.500	85.0 - 115	112	113	mg/L	1.06	20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Thallium, Total	2305811	0.548	0.558	ND	0.500	70.0 - 130	110	112	mg/L	1.81	20.0

Analytical Set

1123030

EPA 624.1

BFB

Parameter	Sample	RefMass	Reading	%	Limits%	File
BFB Mass 173	1123030	174	140	1.3	0 - 2.00	126423572
BFB Mass 174	1123030	95.0	10384	56.9	50.0 - 100	126423572
BFB Mass 175	1123030	174	921	8.9	5.00 - 9.00	126423572
BFB Mass 176	1123030	174	10267	98.9	95.0 - 101	126423572
BFB Mass 177	1123030	176	672	6.5	5.00 - 9.00	126423572
BFB Mass 50	1123030	95.0	4030	22.1	15.0 - 40.0	126423572
BFB Mass 75	1123030	95.0	9801	53.7	30.0 - 60.0	126423572
BFB Mass 95	1123030	95.0	18235	100.0	100 - 100	126423572
BFB Mass 96	1123030	95.0	1272	7.0	5.00 - 9.00	126423572

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
1,1,1-Trichloroethane	1123030	ND	0.531	1.00	ug/L	126423576
1,1,2-Trichloroethane	1123030	ND	0.563	1.00	ug/L	126423576
1,1-Dichloroethane	1123030	ND	0.593	1.00	ug/L	126423576
1,1-Dichloroethylene	1123030	ND	0.574	1.00	ug/L	126423576
1,2-Dibromoethane (EDB)	1123030	ND	0.562	1.00	ug/L	126423576
1,2-Dichloroethane	1123030	ND	0.590	1.00	ug/L	126423576
1,2-Dichloropropane	1123030	ND	0.615	1.00	ug/L	126423576
Benzene	1123030	ND	0.453	1.00	ug/L	126423576

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Parameter	PrepSet	Reading	MDL	MQL	Units	File
Bromodichloromethane	1123030	ND	0.409	1.00	ug/L	126423576
Bromoform	1123030	ND	0.500	1.00	ug/L	126423576
Carbon Tetrachloride	1123030	ND	0.299	1.00	ug/L	126423576
Chlorobenzene	1123030	ND	0.558	1.00	ug/L	126423576
Chloroethane	1123030	ND	1.12	1.12	ug/L	126423576
Chloroform	1123030	ND	0.463	1.00	ug/L	126423576
Chloromethane (Methyl Chloride)	1123030	ND	0.811	1.00	ug/L	126423576
cis-1,3-Dichloropropene	1123030	ND	0.660	1.00	ug/L	126423576
Dibromochloromethane	1123030	ND	0.311	1.00	ug/L	126423576
Dichloromethane	1123030	ND	1.02	1.02	ug/L	126423576
Ethylbenzene	1123030	ND	0.498	1.00	ug/L	126423576
m-Dichlorobenzene (1,3-DCB)	1123030	ND	0.619	1.00	ug/L	126423576
Methyl ethyl ketone (Butanone)	1123030	ND	0.742	1.00	ug/L	126423576
o-Dichlorobenzene (1,2-DCB)	1123030	ND	0.532	1.00	ug/L	126423576
p-Dichlorobenzene (1,4-DCB)	1123030	ND	0.837	1.00	ug/L	126423576
Tetrachloroethylene	1123030	ND	0.607	1.00	ug/L	126423576
Toluene	1123030	ND	0.655	1.00	ug/L	126423576
trans-1,2-Dichloroethylene	1123030	ND	0.701	1.00	ug/L	126423576
trans-1,3-Dichloropropene	1123030	ND	0.627	1.00	ug/L	126423576
Trichloroethylene	1123030	ND	0.521	1.00	ug/L	126423576
Vinyl chloride	1123030	ND	0.702	1.00	ug/L	126423576

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	1123030	LCS	99990	99910	49960	149900	126423573	1123030
1,4-DichlorobenzeneD4 (ISTD)	1123030	LCS Dup	100400	99910	49960	149900	126423574	1123030
1,4-DichlorobenzeneD4 (ISTD)	1123030	Blank	91680	99910	49960	149900	126423576	1123030
ChlorobenzeneD5 (ISTD)	1123030	LCS	210300	205900	103000	308900	126423573	1123030
ChlorobenzeneD5 (ISTD)	1123030	LCS Dup	208900	205900	103000	308900	126423574	1123030
ChlorobenzeneD5 (ISTD)	1123030	Blank	212500	205900	103000	308900	126423576	1123030
1,4-DichlorobenzeneD4 (ISTD)	2305623	Unknown	82270	99910	49960	149900	126423579	1123030
ChlorobenzeneD5 (ISTD)	2305623	Unknown	190600	205900	103000	308900	126423579	1123030
1,4-DichlorobenzeneD4 (ISTD)	2305754	MS	91100	99910	49960	149900	126423581	1123030
1,4-DichlorobenzeneD4 (ISTD)	2305754	MSD	90720	99910	49960	149900	126423582	1123030
ChlorobenzeneD5 (ISTD)	2305754	MS	187900	205900	103000	308900	126423581	1123030
ChlorobenzeneD5 (ISTD)	2305754	MSD	185900	205900	103000	308900	126423582	1123030

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	1123030	LCS	11.97	11.97	11.91	12.03	126423573	1123030
1,4-DichlorobenzeneD4 (ISTD)	1123030	LCS Dup	11.97	11.97	11.91	12.03	126423574	1123030
1,4-DichlorobenzeneD4 (ISTD)	1123030	Blank	11.97	11.97	11.91	12.03	126423576	1123030
ChlorobenzeneD5 (ISTD)	1123030	LCS	9.597	9.597	9.537	9.657	126423573	1123030
ChlorobenzeneD5 (ISTD)	1123030	LCS Dup	9.597	9.597	9.537	9.657	126423574	1123030
ChlorobenzeneD5 (ISTD)	1123030	Blank	9.597	9.597	9.537	9.657	126423576	1123030

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Project
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IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	2305623	Unknown	11.97	11.97	11.91	12.03	126423579	1123030
ChlorobenzeneD5 (ISTD)	2305623	Unknown	9.597	9.597	9.537	9.657	126423579	1123030
1,4-DichlorobenzeneD4 (ISTD)	2305754	MS	11.97	11.97	11.91	12.03	126423581	1123030
1,4-DichlorobenzeneD4 (ISTD)	2305754	MSD	11.97	11.97	11.91	12.03	126423582	1123030
ChlorobenzeneD5 (ISTD)	2305754	MS	9.597	9.597	9.537	9.657	126423581	1123030
ChlorobenzeneD5 (ISTD)	2305754	MSD	9.597	9.597	9.537	9.657	126423582	1123030

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,1,1-Trichloroethane	1123030	20.7	20.2	20.0	70.0 - 130	104	101	ug/L	2.93	21.0
1,1,2,2-Tetrachloroethane	1123030	22.8	22.0	20.0	60.0 - 140	114	110	ug/L	3.57	36.0
1,1,2-Trichloroethane	1123030	21.3	21.8	20.0	70.0 - 130	106	109	ug/L	2.79	27.0
1,1-Dichloroethane	1123030	21.5	21.0	20.0	70.0 - 130	108	105	ug/L	2.82	24.0
1,1-Dichloroethylene	1123030	21.0	21.0	20.0	50.0 - 150	105	105	ug/L	0	40.0
1,2-Dibromoethane (EDB)	1123030	21.6	21.3	20.0	78.4 - 122	108	106	ug/L	1.87	30.0
1,2-Dichloroethane	1123030	21.6	21.9	20.0	70.0 - 130	108	110	ug/L	1.83	29.0
1,2-Dichloropropane	1123030	21.3	21.2	20.0	35.0 - 165	106	106	ug/L	0	69.0
Benzene	1123030	20.1	19.5	20.0	65.0 - 135	100	97.5	ug/L	2.53	33.0
Bromodichloromethane	1123030	21.8	21.3	20.0	65.0 - 135	109	106	ug/L	2.79	34.0
Bromoform	1123030	20.8	20.1	20.0	70.0 - 130	104	100	ug/L	3.92	25.0
Bromomethane (Methyl Bromi	1123030	16.4	16.2	20.0	15.0 - 185	82.0	81.0	ug/L	1.23	90.0
Carbon Tetrachloride	1123030	21.9	21.4	20.0	70.0 - 130	110	107	ug/L	2.76	26.0
Chlorobenzene	1123030	20.1	20.2	20.0	65.0 - 135	100	101	ug/L	0.995	29.0
Chloroethane	1123030	19.6	19.7	20.0	40.0 - 160	98.0	98.5	ug/L	0.509	47.0
Chloroform	1123030	21.2	20.6	20.0	70.0 - 135	106	103	ug/L	2.87	32.0
Chloromethane (Methyl Chloride)	1123030	17.2	16.4	20.0	0.100 - 205	86.0	82.0	ug/L	4.76	472
cis-1,3-Dichloropropene	1123030	19.8	19.4	20.0	25.0 - 175	99.0	97.0	ug/L	2.04	79.0
Dibromochloromethane	1123030	21.0	20.7	20.0	70.0 - 135	105	104	ug/L	0.957	30.0
Dichloromethane	1123030	20.8	20.5	20.0	60.0 - 140	104	102	ug/L	1.94	192
Ethylbenzene	1123030	21.7	21.5	20.0	60.0 - 140	108	108	ug/L	0	34.0
m-Dichlorobenzene (1,3-DCB)	1123030	22.3	21.4	20.0	70.0 - 130	112	107	ug/L	4.57	24.0
Methyl ethyl ketone (Butanone)	1123030	23.2	23.3	20.0	62.3 - 136	116	116	ug/L	0	30.0
o-Dichlorobenzene (1,2-DCB)	1123030	21.5	20.9	20.0	65.0 - 135	108	104	ug/L	3.77	31.0
p-Dichlorobenzene (1,4-DCB)	1123030	21.3	21.1	20.0	65.0 - 135	106	106	ug/L	0	31.0
Tetrachloroethylene	1123030	21.2	20.9	20.0	70.0 - 130	106	104	ug/L	1.90	23.0
Toluene	1123030	19.5	19.5	20.0	70.0 - 130	97.5	97.5	ug/L	0	22.0
trans-1,2-Dichloroethylene	1123030	19.7	19.6	20.0	70.0 - 130	98.5	98.0	ug/L	0.509	27.0
trans-1,3-Dichloropropene	1123030	21.0	21.1	20.0	50.0 - 150	105	106	ug/L	0.948	52.0
Trichloroethylene	1123030	20.3	20.3	20.0	65.0 - 135	102	102	ug/L	0	29.0
Vinyl chloride	1123030	21.5	20.3	20.0	5.00 - 195	108	102	ug/L	5.71	100

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
1,1,1-Trichloroethane	2305754	98.6	96.8	1.35	100	52.0 - 162	97.2	95.4	ug/L	1.87	36.0
1,1,2,2-Tetrachloroethane	2305754	106	106	1.35	100	46.0 - 157	105	105	ug/L	0	61.0

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MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
1,1,2-Trichloroethane	2305754	108	109	1.35	100	52.0 - 150	107	108	ug/L	0.933	45.0
1,1-Dichloroethane	2305754	104	105	1.35	100	59.0 - 155	103	104	ug/L	0.969	40.0
1,1-Dichloroethylene	2305754	105	113	1.35	100	0.100 - 234	104	112	ug/L	7.43	32.0
1,2-Dibromoethane (EDB)	2305754	104	108	1.35	100	49.3 - 120	103	107	ug/L	3.82	30.0
1,2-Dichloroethane	2305754	108	105	1.35	100	49.0 - 155	107	104	ug/L	2.85	49.0
1,2-Dichloropropane	2305754	104	103	1.35	100	0.100 - 210	103	102	ug/L	0.979	55.0
Benzene	2305754	96.8	97.4	1.35	100	37.0 - 151	95.4	96.0	ug/L	0.627	61.0
Bromodichloromethane	2305754	103	102	1.35	100	35.0 - 155	102	101	ug/L	0.989	56.0
Bromoform	2305754	91.6	92.0	1.35	100	45.0 - 169	90.2	90.6	ug/L	0.442	42.0
Bromomethane (Methyl Bromi	2305754	69.5	70.4	1.35	100	0.100 - 242	68.2	69.0	ug/L	1.31	61.0
Carbon Tetrachloride	2305754	87.2	88.0	1.35	100	70.0 - 140	85.8	86.6	ug/L	0.928	41.0
Chlorobenzene	2305754	98.7	99.7	1.35	100	37.0 - 160	97.4	98.4	ug/L	1.02	53.0
Chloroethane	2305754	90.7	90.4	1.35	100	14.0 - 230	89.4	89.0	ug/L	0.336	78.0
Chloroform	2305754	101	105	1.35	100	51.0 - 138	99.6	104	ug/L	3.94	54.0
Chloromethane (Methyl Chloride)	2305754	80.2	78.5	1.35	100	0.100 - 273	78.8	77.2	ug/L	2.18	60.0
cis-1,3-Dichloropropene	2305754	92.9	92.6	1.35	100	0.100 - 227	91.6	91.2	ug/L	0.328	58.0
Dibromochloromethane	2305754	95.8	97.6	1.35	100	53.0 - 149	94.4	96.2	ug/L	1.89	50.0
Dichloromethane	2305754	105	104	1.35	100	0.100 - 221	104	103	ug/L	0.969	28.0
Ethylbenzene	2305754	103	104	1.35	100	37.0 - 162	102	103	ug/L	0.979	63.0
m-Dichlorobenzene (1,3-DCB)	2305754	106	107	1.35	100	59.0 - 156	105	106	ug/L	0.951	43.0
Methyl ethyl ketone (Butanone)	2305754	127	135	11.0	100	0.100 - 211	116	124	ug/L	6.67	30.0
o-Dichlorobenzene (1,2-DCB)	2305754	103	104	1.35	100	18.0 - 190	102	103	ug/L	0.979	57.0
p-Dichlorobenzene (1,4-DCB)	2305754	101	100	1.35	100	18.0 - 190	99.6	98.6	ug/L	1.01	57.0
Tetrachloroethylene	2305754	102	103	1.35	100	64.0 - 148	101	102	ug/L	0.989	39.0
Toluene	2305754	96.4	95.6	1.35	100	47.0 - 150	95.0	94.2	ug/L	0.845	41.0
trans-1,2-Dichloroethylene	2305754	96.6	94.2	1.35	100	54.0 - 156	95.2	92.8	ug/L	2.55	45.0
trans-1,3-Dichloropropene	2305754	98.9	103	1.35	100	17.0 - 183	97.6	102	ug/L	4.12	86.0
Trichloroethylene	2305754	104	103	1.35	100	70.0 - 157	103	102	ug/L	0.979	48.0
Vinyl chloride	2305754	82.4	82.4	1.35	100	0.100 - 251	81.0	81.0	ug/L	0	66.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
1,2-DCA-d4 (SURR)	1123030	LCS	20.2	20.0	ug/L	101	70.0 - 130	126423573
1,2-DCA-d4 (SURR)	1123030	LCS Dup	20.7	20.0	ug/L	104	70.0 - 130	126423574
1,2-DCA-d4 (SURR)	1123030	Blank	21.0	20.0	ug/L	105	70.0 - 130	126423576
Bromofluorobenzene (SURR)	1123030	LCS	19.4	20.0	ug/L	97.0	70.0 - 130	126423573
Bromofluorobenzene (SURR)	1123030	LCS Dup	19.0	20.0	ug/L	95.0	70.0 - 130	126423574
Bromofluorobenzene (SURR)	1123030	Blank	19.8	20.0	ug/L	99.0	70.0 - 130	126423576
Dibromofluoromethane (SURR)	1123030	LCS	19.6	20.0	ug/L	98.0	70.0 - 130	126423573
Dibromofluoromethane (SURR)	1123030	LCS Dup	19.9	20.0	ug/L	99.5	70.0 - 130	126423574
Dibromofluoromethane (SURR)	1123030	Blank	19.6	20.0	ug/L	98.0	70.0 - 130	126423576
TolueneD8 (SURR)	1123030	LCS	19.8	20.0	ug/L	99.0	70.0 - 130	126423573
TolueneD8 (SURR)	1123030	LCS Dup	19.5	20.0	ug/L	97.5	70.0 - 130	126423574
TolueneD8 (SURR)	1123030	Blank	19.9	20.0	ug/L	99.5	70.0 - 130	126423576
1,2-DCA-d4 (SURR)	2305623	Unknown	21.5	20.0	ug/L	108	70.0 - 130	126423579

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Surrogate								
<u>Parameter</u>	<u>Sample</u>	<u>Type</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Bromofluorobenzene (SURR)	2305623	Unknown	20.5	20.0	ug/L	102	70.0 - 130	126423579
Dibromofluoromethane (SURR)	2305623	Unknown	19.6	20.0	ug/L	98.0	70.0 - 130	126423579
TolueneD8 (SURR)	2305623	Unknown	19.7	20.0	ug/L	98.5	70.0 - 130	126423579
1,2-DCA-d4 (SURR)	2305754	MS	20.8	20.0	ug/L	104	70.0 - 130	126423581
1,2-DCA-d4 (SURR)	2305754	MSD	20.7	20.0	ug/L	104	70.0 - 130	126423582
Bromofluorobenzene (SURR)	2305754	MS	18.5	20.0	ug/L	92.5	70.0 - 130	126423581
Bromofluorobenzene (SURR)	2305754	MSD	19.0	20.0	ug/L	95.0	70.0 - 130	126423582
Dibromofluoromethane (SURR)	2305754	MS	20.1	20.0	ug/L	100	70.0 - 130	126423581
Dibromofluoromethane (SURR)	2305754	MSD	20.2	20.0	ug/L	101	70.0 - 130	126423582
TolueneD8 (SURR)	2305754	MS	19.7	20.0	ug/L	98.5	70.0 - 130	126423581
TolueneD8 (SURR)	2305754	MSD	20.0	20.0	ug/L	100	70.0 - 130	126423582

Analytical Set

1123033

EPA 624.1

BFB						
<u>Parameter</u>	<u>Sample</u>	<u>RefMass</u>	<u>Reading</u>	<u>%</u>	<u>Limits%</u>	<u>File</u>
BFB Mass 173	1123033	174	140	1.3	0 - 2.00	126423603
BFB Mass 174	1123033	95.0	10384	56.9	50.0 - 100	126423603
BFB Mass 175	1123033	174	921	8.9	5.00 - 9.00	126423603
BFB Mass 176	1123033	174	10267	98.9	95.0 - 101	126423603
BFB Mass 177	1123033	176	672	6.5	5.00 - 9.00	126423603
BFB Mass 50	1123033	95.0	4030	22.1	15.0 - 40.0	126423603
BFB Mass 75	1123033	95.0	9801	53.7	30.0 - 60.0	126423603
BFB Mass 95	1123033	95.0	18235	100.0	100 - 100	126423603
BFB Mass 96	1123033	95.0	1272	7.0	5.00 - 9.00	126423603

Blank						
<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MDL</u>	<u>Units</u>	<u>File</u>
Acrolein	1123033	ND	2.33	4.00	ug/L	126423607
Acrylonitrile	1123033	ND	0.998	1.00	ug/L	126423607

IS Areas								
<u>Parameter</u>	<u>Sample</u>	<u>Type</u>	<u>Reading</u>	<u>CCVISM</u>	<u>Low</u>	<u>High</u>	<u>File</u>	<u>PrepSet</u>
1,4-DichlorobenzeneD4 (ISTD)	1123033	LCS	99990	99910	49960	149900	126423604	1123033
1,4-DichlorobenzeneD4 (ISTD)	1123033	LCS Dup	100400	99910	49960	149900	126423605	1123033
1,4-DichlorobenzeneD4 (ISTD)	1123033	Blank	91680	99910	49960	149900	126423607	1123033
ChlorobenzeneD5 (ISTD)	1123033	LCS	210300	205900	103000	308900	126423604	1123033
ChlorobenzeneD5 (ISTD)	1123033	LCS Dup	208900	205900	103000	308900	126423605	1123033
ChlorobenzeneD5 (ISTD)	1123033	Blank	212500	205900	103000	308900	126423607	1123033
1,4-DichlorobenzeneD4 (ISTD)	2305623	Unknown	85540	99910	49960	149900	126423608	1123033
ChlorobenzeneD5 (ISTD)	2305623	Unknown	196700	205900	103000	308900	126423608	1123033
1,4-DichlorobenzeneD4 (ISTD)	2305754	MS	91100	99910	49960	149900	126423611	1123033
1,4-DichlorobenzeneD4 (ISTD)	2305754	MSD	90720	99910	49960	149900	126423612	1123033
ChlorobenzeneD5 (ISTD)	2305754	MS	187900	205900	103000	308900	126423611	1123033
ChlorobenzeneD5 (ISTD)	2305754	MSD	185900	205900	103000	308900	126423612	1123033

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IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	1123033	LCS	11.97	11.97	11.91	12.03	126423604	1123033
1,4-DichlorobenzeneD4 (ISTD)	1123033	LCS Dup	11.97	11.97	11.91	12.03	126423605	1123033
1,4-DichlorobenzeneD4 (ISTD)	1123033	Blank	11.97	11.97	11.91	12.03	126423607	1123033
ChlorobenzeneD5 (ISTD)	1123033	LCS	9.597	9.597	9.537	9.657	126423604	1123033
ChlorobenzeneD5 (ISTD)	1123033	LCS Dup	9.597	9.597	9.537	9.657	126423605	1123033
ChlorobenzeneD5 (ISTD)	1123033	Blank	9.597	9.597	9.537	9.657	126423607	1123033
1,4-DichlorobenzeneD4 (ISTD)	2305623	Unknown	11.97	11.97	11.91	12.03	126423608	1123033
ChlorobenzeneD5 (ISTD)	2305623	Unknown	9.597	9.597	9.537	9.657	126423608	1123033
1,4-DichlorobenzeneD4 (ISTD)	2305754	MS	11.97	11.97	11.91	12.03	126423611	1123033
1,4-DichlorobenzeneD4 (ISTD)	2305754	MSD	11.97	11.97	11.91	12.03	126423612	1123033
ChlorobenzeneD5 (ISTD)	2305754	MS	9.597	9.597	9.537	9.657	126423611	1123033
ChlorobenzeneD5 (ISTD)	2305754	MSD	9.597	9.597	9.537	9.657	126423612	1123033

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Acrolein	1123033	60.6	52.2	40.0	60.0 - 140	152 *	130	ug/L	15.6	30.0
Acrylonitrile	1123033	43.8	46.4	40.0	60.0 - 140	110	116	ug/L	5.31	30.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Acrolein	2305754	21.3	13.6	ND	200	40.0 - 160	10.6 *	6.80 *	ug/L	44.1	60.0
Acrylonitrile	2305754	251	247	ND	200	40.0 - 160	126	124	ug/L	1.61	60.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
1,2-DCA-d4 (SURR)	1123033	LCS	20.2	20.0	ug/L	101	70.0 - 130	126423604
1,2-DCA-d4 (SURR)	1123033	LCS Dup	20.7	20.0	ug/L	104	70.0 - 130	126423605
1,2-DCA-d4 (SURR)	1123033	Blank	21.0	20.0	ug/L	105	70.0 - 130	126423607
Bromofluorobenzene (SURR)	1123033	LCS	19.4	20.0	ug/L	97.0	70.0 - 130	126423604
Bromofluorobenzene (SURR)	1123033	LCS Dup	19.0	20.0	ug/L	95.0	70.0 - 130	126423605
Bromofluorobenzene (SURR)	1123033	Blank	19.8	20.0	ug/L	99.0	70.0 - 130	126423607
Dibromofluoromethane (SURR)	1123033	LCS	19.6	20.0	ug/L	98.0	70.0 - 130	126423604
Dibromofluoromethane (SURR)	1123033	LCS Dup	19.9	20.0	ug/L	99.5	70.0 - 130	126423605
Dibromofluoromethane (SURR)	1123033	Blank	19.6	20.0	ug/L	98.0	70.0 - 130	126423607
TolueneD8 (SURR)	1123033	LCS	19.8	20.0	ug/L	99.0	70.0 - 130	126423604
TolueneD8 (SURR)	1123033	LCS Dup	19.5	20.0	ug/L	97.5	70.0 - 130	126423605
TolueneD8 (SURR)	1123033	Blank	19.9	20.0	ug/L	99.5	70.0 - 130	126423607
1,2-DCA-d4 (SURR)	2305623	Unknown	20.5	20.0	ug/L	102	70.0 - 130	126423608
Bromofluorobenzene (SURR)	2305623	Unknown	19.7	20.0	ug/L	98.5	70.0 - 130	126423608
Dibromofluoromethane (SURR)	2305623	Unknown	19.0	20.0	ug/L	95.0	70.0 - 130	126423608
TolueneD8 (SURR)	2305623	Unknown	19.5	20.0	ug/L	97.5	70.0 - 130	126423608
1,2-DCA-d4 (SURR)	2305754	MS	20.8	20.0	ug/L	104	70.0 - 130	126423611
1,2-DCA-d4 (SURR)	2305754	MSD	20.7	20.0	ug/L	104	70.0 - 130	126423612
Bromofluorobenzene (SURR)	2305754	MS	18.5	20.0	ug/L	92.5	70.0 - 130	126423611
Bromofluorobenzene (SURR)	2305754	MSD	19.0	20.0	ug/L	95.0	70.0 - 130	126423612
Dibromofluoromethane (SURR)	2305754	MS	20.1	20.0	ug/L	100	70.0 - 130	126423611

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Surrogate								
Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
Dibromofluoromethane (Surr)	2305754	MSD	20.2	20.0	ug/L	101	70.0 - 130	126423612
TolueneD8 (Surr)	2305754	MS	19.7	20.0	ug/L	98.5	70.0 - 130	126423611
TolueneD8 (Surr)	2305754	MSD	20.0	20.0	ug/L	100	70.0 - 130	126423612

Analytical Set

1123853

EPA 608.3

Blank								
Parameter	PrepSet	Reading	MDL	MQL	Units	File		
PCB-1016	1123138	ND	0.202	0.202	ug/L	126443786		
PCB-1221	1123138	ND	0.143	0.200	ug/L	126443786		
PCB-1232	1123138	ND	0.143	0.200	ug/L	126443786		
PCB-1242	1123138	ND	0.192	0.200	ug/L	126443786		
PCB-1248	1123138	ND	0.143	0.200	ug/L	126443786		
PCB-1254	1123138	ND	0.143	0.200	ug/L	126443786		
PCB-1260	1123138	ND	0.161	0.200	ug/L	126443786		
PCB-1262	1123138	ND	0.198	0.200	ug/L	126443786		
PCB-1268	1123138	ND	0.143	0.200	ug/L	126443786		

CCV								
Parameter	Reading	Known	Units	Recover%	Limits%	File		
PCB-1016	983	1000	ug/L	98.3	80.0 - 115	126443779		
PCB-1016	1060	1000	ug/L	106	80.0 - 115	126443785		
PCB-1016	1130	1000	ug/L	113	80.0 - 115	126443793		
PCB-1260	881	1000	ug/L	88.1	80.0 - 115	126443779		
PCB-1260	911	1000	ug/L	91.1	80.0 - 115	126443785		
PCB-1260	945	1000	ug/L	94.5	80.0 - 115	126443793		

LCS Dup										
Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
PCB-1016	1123138	798	887	1000	39.8 - 135	79.8	88.7	ug/L	10.6	30.0
PCB-1260	1123138	649	755	1000	36.1 - 134	64.9	75.5	ug/L	15.1	30.0

Surrogate								
Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
Decachlorobiphenyl	1123138	Blank	45.3	100	ug/L	45.3	10.0 - 200	126443786
Tetrachloro-m-Xylene (Surr)	1123138	Blank	48.5	100	ug/L	48.5	10.0 - 200	126443786
Decachlorobiphenyl	2305623	Unknown	0.580	0.976	ug/L	59.4	10.0 - 200	126443791
Tetrachloro-m-Xylene (Surr)	2305623	Unknown	0.578	0.976	ug/L	59.2	10.0 - 200	126443791

Analytical Set

1124948

ASTM D7065-11

Blank								
Parameter	PrepSet	Reading	MDL	MQL	Units	File		
Nonylphenol	1124341	ND	5.00	30.0	ug/L	126470972		

CCV								
Parameter	Reading	Known	Units	Recover%	Limits%	File		
Nonylphenol	150000	150000	ug/L	99.8	70.0 - 130	126470971		

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Nonylphenol	164000	150000	ug/L	110	70.0 - 130	126470983

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
Acenaphthene-d10-ISTD	624841	CCV	669900	669900	335000	1005000	126470971	624841
Acenaphthene-d10-ISTD	624841	CCV	645200	669900	335000	1005000	126470983	624841
Phenanthrene-d10-ISTD	624841	CCV	892600	892600	446300	1339000	126470971	624841
Phenanthrene-d10-ISTD	624841	CCV	934700	892600	446300	1339000	126470983	624841
Acenaphthene-d10-ISTD	1124341	Blank	1550000	669900	335000	1005000	126470972	1124341
Acenaphthene-d10-ISTD	1124341	LCS	1124000	669900	335000	1005000	126470973	1124341
Acenaphthene-d10-ISTD	1124341	LCS Dup	1144000	669900	335000	1005000	126470974	1124341
Phenanthrene-d10-ISTD	1124341	Blank	1577000	892600	446300	1339000	126470972	1124341
Phenanthrene-d10-ISTD	1124341	LCS	1107000	892600	446300	1339000	126470973	1124341
Phenanthrene-d10-ISTD	1124341	LCS Dup	1139000	892600	446300	1339000	126470974	1124341
Acenaphthene-d10-ISTD	2305623	Unknown	1184000	669900	335000	1005000	126470977	1124341
Phenanthrene-d10-ISTD	2305623	Unknown	1155000	892600	446300	1339000	126470977	1124341

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	File	PrepSet
Acenaphthene-d10-ISTD	624841	CCV	7.217	7.217	7.157	7.277	126470971	624841
Acenaphthene-d10-ISTD	624841	CCV	7.211	7.217	7.157	7.277	126470983	624841
Phenanthrene-d10-ISTD	624841	CCV	8.450	8.450	8.390	8.510	126470971	624841
Phenanthrene-d10-ISTD	624841	CCV	8.450	8.450	8.390	8.510	126470983	624841
Acenaphthene-d10-ISTD	1124341	Blank	7.211	7.217	7.157	7.277	126470972	1124341
Acenaphthene-d10-ISTD	1124341	LCS	7.211	7.217	7.157	7.277	126470973	1124341
Acenaphthene-d10-ISTD	1124341	LCS Dup	7.211	7.217	7.157	7.277	126470974	1124341
Phenanthrene-d10-ISTD	1124341	Blank	8.450	8.450	8.390	8.510	126470972	1124341
Phenanthrene-d10-ISTD	1124341	LCS	8.455	8.450	8.390	8.510	126470973	1124341
Phenanthrene-d10-ISTD	1124341	LCS Dup	8.456	8.450	8.390	8.510	126470974	1124341
Acenaphthene-d10-ISTD	2305623	Unknown	7.211	7.217	7.157	7.277	126470977	1124341
Phenanthrene-d10-ISTD	2305623	Unknown	8.456	8.450	8.390	8.510	126470977	1124341

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Nonylphenol	1124341	49.1	72.7	150	56.0 - 112	32.7 *	48.5 *	ug/L	38.9 *	30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
4-Nonylphenol-SURR	624841	CCV	28300	25000	ug/L	113	50.0 - 130	126470971
4-Nonylphenol-SURR	624841	CCV	29600	25000	ug/L	118	50.0 - 130	126470983
4-Nonylphenol-SURR	1124341	Blank	14700	25000	ug/L	58.8	50.0 - 130	126470972
4-Nonylphenol-SURR	1124341	LCS	16200	25000	ug/L	64.8	50.0 - 130	126470973
4-Nonylphenol-SURR	1124341	LCS Dup	24000	25000	ug/L	96.0	50.0 - 130	126470974
4-Nonylphenol-SURR	2305623	Unknown	32.6	29.0	ug/L	112	50.0 - 130	126470977

Analytical Set

1125008

EPA 625.1

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Parameter	PrepSet	Reading	MDL	MQL	Units	File
1,2,4,5-Tetrachlorobenzene	1123370	ND	1.03	1.03	ug/L	126472016
1,2,4-Trichlorobenzene	1123370	ND	0.941	1.00	ug/L	126472016
1,2-Dichlorobenzene	1123370	ND	1.04	5.00	ug/L	126472016
1,2-DPH (as azobenzene)	1123370	ND	0.238	1.00	ug/L	126472016
1,3-Dichlorobenzene	1123370	ND	0.954	5.00	ug/L	126472016
1,4-Dichlorobenzene	1123370	ND	1.01	5.00	ug/L	126472016
2,4,5-Trichlorophenol	1123370	ND	0.961	5.00	ug/L	126472016
2,4,6-Trichlorophenol	1123370	ND	1.24	2.00	ug/L	126472016
2,4-Dichlorophenol	1123370	ND	0.222	1.00	ug/L	126472016
2,4-Dimethylphenol	1123370	ND	0.536	1.00	ug/L	126472016
2,4-Dinitrophenol	1123370	ND	1.34	2.00	ug/L	126472016
2,4-Dinitrotoluene	1123370	ND	1.35	2.00	ug/L	126472016
2,6-Dinitrotoluene	1123370	ND	1.29	2.00	ug/L	126472016
2-Chloronaphthalene	1123370	ND	0.150	1.00	ug/L	126472016
2-Chlorophenol	1123370	ND	0.275	1.00	ug/L	126472016
2-Methylphenol (o-Cresol)	1123370	ND	8.48	10.0	ug/L	126472016
2-Nitrophenol	1123370	ND	0.554	1.00	ug/L	126472016
3&4-Methylphenol (m&p-Cresol)	1123370	ND	7.78	8.00	ug/L	126472016
3,3'-Dichlorobenzidine	1123370	ND	1.39	2.00	ug/L	126472016
4,6-Dinitro-2-methylphenol	1123370	ND	1.15	2.00	ug/L	126472016
4-Bromophenyl phenyl ether	1123370	ND	0.772	1.00	ug/L	126472016
4-Chlorophenyl phenyl ethe	1123370	ND	0.202	1.00	ug/L	126472016
4-Nitrophenol	1123370	ND	0.789	1.00	ug/L	126472016
Acenaphthene	1123370	ND	0.177	1.00	ug/L	126472016
Acenaphthylene	1123370	ND	0.240	1.00	ug/L	126472016
Aniline	1123370	ND	2470	2470	ug/L	126472016
Anthracene	1123370	ND	0.241	1.00	ug/L	126472016
Benzidine	1123370	ND	1.40	1.50	ug/L	126472016
Benzo(a)anthracene	1123370	ND	0.225	1.00	ug/L	126472016
Benzo(a)pyrene	1123370	ND	0.900	1.00	ug/L	126472016
Benzo(b)fluoranthene	1123370	ND	0.547	1.00	ug/L	126472016
Benzo(ghi)perylene	1123370	ND	0.881	1.00	ug/L	126472016
Benzo(k)fluoranthene	1123370	ND	0.252	1.00	ug/L	126472016
Benzyl Butyl phthalate	1123370	0.320	0.204	7.50	ug/L	126472016
Bis(2-chloroethoxy)methane	1123370	ND	0.277	1.00	ug/L	126472016
Bis(2-chloroethyl)ether	1123370	ND	0.348	1.00	ug/L	126472016
Bis(2-chloroisopropyl)ether	1123370	ND	0.738	1.00	ug/L	126472016
Bis(2-ethylhexyl)phthalate	1123370	ND	1.12	7.50	ug/L	126472016
Chrysene (Benzo(a)phenanthrene)	1123370	ND	0.289	1.00	ug/L	126472016
Dibenz(a,h)anthracene	1123370	ND	0.689	1.00	ug/L	126472016
Diethyl phthalate	1123370	ND	0.253	5.70	ug/L	126472016
Dimethyl phthalate	1123370	ND	0.540	4.80	ug/L	126472016
Di-n-butylphthalate	1123370	ND	0.978	7.50	ug/L	126472016
Di-n-octylphthalate	1123370	ND	1.92	2.00	ug/L	126472016
Fluoranthene(Benzo(j,k)fluorene)	1123370	ND	0.318	1.00	ug/L	126472016

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<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Fluorene	1123370	ND	0.275	1.00	ug/L	126472016
Hexachlorobenzene	1123370	ND	0.871	1.00	ug/L	126472016
Hexachlorobutadiene	1123370	ND	1.03	1.03	ug/L	126472016
Hexachlorocyclopentadiene	1123370	ND	0.536	1.00	ug/L	126472016
Hexachloroethane	1123370	ND	1.05	2.00	ug/L	126472016
Indeno(1,2,3-cd)pyrene	1123370	ND	0.596	1.00	ug/L	126472016
Isophorone	1123370	ND	0.429	1.00	ug/L	126472016
Naphthalene	1123370	ND	0.225	1.00	ug/L	126472016
Nitrobenzene	1123370	ND	0.271	1.00	ug/L	126472016
n-Nitrosodiethylamine	1123370	ND	0.747	1.00	ug/L	126472016
N-Nitrosodimethylamine	1123370	ND	0.542	1.00	ug/L	126472016
n-Nitroso-di-n-butylamine	1123370	ND	0.210	1.00	ug/L	126472016
N-Nitrosodi-n-propylamine	1123370	ND	0.425	1.00	ug/L	126472016
N-Nitrosodiphenylamine (as DPA	1123370	ND	0.404	1.00	ug/L	126472016
p-Chloro-m-Cresol (4-Chloro-3-me	1123370	ND	0.588	1.00	ug/L	126472016
Pentachlorobenzene	1123370	ND	0.977	1.00	ug/L	126472016
Pentachlorophenol	1123370	ND	0.960	5.00	ug/L	126472016
Phenanthrene	1123370	ND	0.269	1.00	ug/L	126472016
Phenol	1123370	ND	0.332	1.00	ug/L	126472016
Pyrene	1123370	ND	0.291	1.00	ug/L	126472016
Pyridine	1123370	ND	1.35	1.35	ug/L	126472016

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
1,2,4,5-Tetrachlorobenzene	48400	50000	ug/L	96.8	60.0 - 140	126472015
1,2,4-Trichlorobenzene	50400	50000	ug/L	101	61.0 - 130	126472015
1,2-Dichlorobenzene	45200	50000	ug/L	90.4	60.0 - 140	126472015
1,2-DPH (as azobenzene)	48600	50000	ug/L	97.2	60.0 - 140	126472015
1,3-Dichlorobenzene	49100	50000	ug/L	98.2	60.0 - 140	126472015
1,4-Dichlorobenzene	45300	50000	ug/L	90.6	60.0 - 140	126472015
2,4,5-Trichlorophenol	49800	50000	ug/L	99.6	69.0 - 130	126472015
2,4,6-Trichlorophenol	47800	50000	ug/L	95.6	69.0 - 130	126472015
2,4-Dichlorophenol	47300	50000	ug/L	94.6	64.0 - 130	126472015
2,4-Dimethylphenol	43300	50000	ug/L	86.6	58.0 - 130	126472015
2,4-Dinitrophenol	46400	50000	ug/L	92.8	39.0 - 173	126472015
2,4-Dinitrotoluene	45900	50000	ug/L	91.8	53.0 - 130	126472015
2,6-Dinitrotoluene	50200	50000	ug/L	100	68.0 - 137	126472015
2-Chloronaphthalene	52700	50000	ug/L	105	70.0 - 130	126472015
2-Chlorophenol	48600	50000	ug/L	97.2	55.0 - 130	126472015
2-Methylphenol (o-Cresol)	43400	50000	ug/L	86.8	60.0 - 140	126472015
2-Nitrophenol	49800	50000	ug/L	99.6	61.0 - 163	126472015
3&4-Methylphenol (m&p-Cresol)	41100	50000	ug/L	82.2	60.0 - 140	126472015
3,3'-Dichlorobenzidine	56400	50000	ug/L	113	18.0 - 213	126472015
4,6-Dinitro-2-methylphenol	43200	50000	ug/L	86.4	56.0 - 130	126472015
4-Bromophenyl phenyl ether	49000	50000	ug/L	98.0	70.0 - 130	126472015

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Parameter	Reading	Known	Units	Recover%	Limits%	File
4-Chlorophenyl phenyl ethe	46000	50000	ug/L	92.0	57.0 - 145	126472015
4-Nitrophenol	34100	50000	ug/L	68.2	35.0 - 135	126472015
Acenaphthene	48200	50000	ug/L	96.4	70.0 - 130	126472015
Acenaphthylene	50500	50000	ug/L	101	60.0 - 130	126472015
Aniline	41400	50000	ug/L	82.8	60.0 - 140	126472015
Anthracene	46800	50000	ug/L	93.6	58.0 - 130	126472015
Benzidine	25700	50000	ug/L	51.4	20.0 - 180	126472015
Benzo(a)anthracene	53100	50000	ug/L	106	42.0 - 133	126472015
Benzo(a)pyrene	52600	50000	ug/L	105	32.0 - 148	126472015
Benzo(b)fluoranthene	49800	50000	ug/L	99.6	42.0 - 140	126472015
Benzo(ghi)perylene	61200	50000	ug/L	122	13.0 - 195	126472015
Benzo(k)fluoranthene	53200	50000	ug/L	106	25.0 - 146	126472015
Benzyl Butyl phthalate	65700	50000	ug/L	131	43.0 - 140	126472015
Bis(2-chloroethoxy)methane	51200	50000	ug/L	102	52.0 - 164	126472015
Bis(2-chloroethyl)ether	49000	50000	ug/L	98.0	52.0 - 130	126472015
Bis(2-chloroisopropyl)ether	47200	50000	ug/L	94.4	63.0 - 139	126472015
Bis(2-ethylhexyl)phthalate	67700	50000	ug/L	135	43.0 - 137	126472015
Chrysene (Benzo(a)phenanthrene)	53500	50000	ug/L	107	44.0 - 140	126472015
Dibenz(a,h)anthracene	57200	50000	ug/L	114	13.0 - 200	126472015
Diethyl phthalate	44300	50000	ug/L	88.6	47.0 - 130	126472015
Dimethyl phthalate	48700	50000	ug/L	97.4	50.0 - 130	126472015
Di-n-butylphthalate	47800	50000	ug/L	95.6	52.0 - 130	126472015
Di-n-octylphthalate	72400	50000	ug/L	145	21.0 - 132 *	126472015
Fluoranthene(Benzo(j,k)fluorene)	45100	50000	ug/L	90.2	47.0 - 130	126472015
Fluorene	45800	50000	ug/L	91.6	70.0 - 130	126472015
Hexachlorobenzene	50300	50000	ug/L	101	38.0 - 142	126472015
Hexachlorobutadiene	41900	50000	ug/L	83.8	68.0 - 130	126472015
Hexachlorocyclopentadiene	58200	50000	ug/L	116	60.0 - 140	126472015
Hexachloroethane	42200	50000	ug/L	84.4	55.0 - 130	126472015
Indeno(1,2,3-cd)pyrene	56400	50000	ug/L	113	13.0 - 151	126472015
Isophorone	54600	50000	ug/L	109	52.0 - 180	126472015
Naphthalene	45000	50000	ug/L	90.0	70.0 - 130	126472015
Nitrobenzene	49200	50000	ug/L	98.4	54.0 - 158	126472015
n-Nitrosodiethylamine	52800	50000	ug/L	106	60.0 - 140	126472015
N-Nitrosodimethylamine	49200	50000	ug/L	98.4	60.0 - 140	126472015
n-Nitroso-di-n-butylamine	46000	50000	ug/L	92.0	60.0 - 140	126472015
N-Nitrosodi-n-propylamine	44900	50000	ug/L	89.8	59.0 - 170	126472015
N-Nitrosodiphenylamine (as DPA	42400	50000	ug/L	84.8	60.0 - 140	126472015
p-Chloro-m-Cresol (4-Chloro-3-me	43900	50000	ug/L	87.8	68.0 - 130	126472015
Pentachlorobenzene	45900	50000	ug/L	91.8	60.0 - 140	126472015
Pentachlorophenol	45500	50000	ug/L	91.0	42.0 - 152	126472015
Phenanthrene	43800	50000	ug/L	87.6	67.0 - 130	126472015
Phenol	43300	50000	ug/L	86.6	48.0 - 130	126472015
Pyrene	61200	50000	ug/L	122	70.0 - 130	126472015
Pyridine	55600	50000	ug/L	111	60.0 - 140	126472015

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DFTPP

Parameter	RefMass	Reading	%	Limits%	File
DFTPP Mass 127	625102 198	5830	54.7	40.0 - 60.0	126472013
DFTPP Mass 197	625102 198	0	0.0	0 - 1.00	126472013
DFTPP Mass 198	625102 198	10662	100.0	100 - 100	126472013
DFTPP Mass 199	625102 198	719	6.7	5.00 - 9.00	126472013
DFTPP Mass 275	625102 198	3008	28.2	10.0 - 30.0	126472013
DFTPP Mass 365	625102 198	568	5.3	1.00 - 100	126472013
DFTPP Mass 441	625102 443	968	54.8	0 - 100	126472013
DFTPP Mass 442	625102 198	9092	85.3	40.0 - 100	126472013
DFTPP Mass 443	625102 442	1766	19.4	17.0 - 23.0	126472013
DFTPP Mass 51	625102 198	3355	31.5	30.0 - 60.0	126472013
DFTPP Mass 68	625102 69.0	2	0.1	0 - 2.00	126472013
DFTPP Mass 69	625102 198	3774	35.4	0 - 100	126472013
DFTPP Mass 70	625102 69.0	19	0.5	0 - 2.00	126472013

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,2,4,5-Tetrachlorobenzene	1123370	8.56	7.91	12.5	27.5 - 85.5	68.5	63.3	ug/L	7.89	50.0
1,2,4-Trichlorobenzene	1123370	7.85	7.36	12.5	44.0 - 142	62.8	58.9	ug/L	6.41	50.0
1,2-Dichlorobenzene	1123370	7.39	7.33	12.5	23.0 - 81.8	59.1	58.6	ug/L	0.850	50.0
1,2-DPH (as azobenzene)	1123370	10.1	10.8	12.5	12.6 - 110	80.8	86.4	ug/L	6.70	50.0
1,3-Dichlorobenzene	1123370	7.20	6.99	12.5	21.1 - 80.5	57.6	55.9	ug/L	3.00	50.0
1,4-Dichlorobenzene	1123370	7.05	6.92	12.5	21.4 - 76.9	56.4	55.4	ug/L	1.79	50.0
2,4,5-Trichlorophenol	1123370	8.80	10.9	12.5	51.3 - 109	70.4	87.2	ug/L	21.3	50.0
2,4,6-Trichlorophenol	1123370	12.9	10.7	12.5	37.0 - 144	103	85.6	ug/L	18.5	58.0
2,4-Dichlorophenol	1123370	10.0	9.85	12.5	39.0 - 135	80.0	78.8	ug/L	1.51	50.0
2,4-Dimethylphenol	1123370	4.48	3.06	12.5	23.0 - 120	35.8	24.5	ug/L	37.5	68.0
2,4-Dinitrophenol	1123370	7.87	10.0	12.5	0.100 - 191	63.0	80.0	ug/L	23.8	132
2,4-Dinitrotoluene	1123370	7.76	10.3	12.5	39.0 - 139	62.1	82.4	ug/L	28.1	42.0
2,6-Dinitrotoluene	1123370	10.6	11.2	12.5	50.0 - 158	84.8	89.6	ug/L	5.50	48.0
2-Chloronaphthalene	1123370	11.0	9.44	12.5	60.0 - 120	88.0	75.5	ug/L	15.3	24.0
2-Chlorophenol	1123370	9.81	9.73	12.5	23.0 - 134	78.5	77.8	ug/L	0.896	61.0
2-Methylphenol (o-Cresol)	1123370	8.90	8.25	12.5	38.9 - 76.1	71.2	66.0	ug/L	7.58	50.0
2-Nitrophenol	1123370	10.3	9.68	12.5	29.0 - 182	82.4	77.4	ug/L	6.26	55.0
3&4-Methylphenol (m&p-Cresol)	1123370	7.92	7.53	12.5	33.0 - 70.4	63.4	60.2	ug/L	5.18	50.0
3,3'-Dichlorobenzidine	1123370	8.29	8.76	12.5	0.100 - 262	66.3	70.1	ug/L	5.57	108
4,6-Dinitro-2-methylphenol	1123370	9.49	9.53	12.5	0.100 - 181	75.9	76.2	ug/L	0.394	203
4-Bromophenyl phenyl ether	1123370	10.5	9.96	12.5	53.0 - 127	84.0	79.7	ug/L	5.25	43.0
4-Chlorophenyl phenyl ethe	1123370	8.68	8.26	12.5	25.0 - 158	69.4	66.1	ug/L	4.87	61.0
4-Nitrophenol	1123370	3.31	3.46	12.5	0.100 - 132	26.5	27.7	ug/L	4.43	131
Acenaphthene	1123370	9.39	9.40	12.5	47.0 - 145	75.1	75.2	ug/L	0.133	48.0
Acenaphthylene	1123370	9.98	9.91	12.5	33.0 - 145	79.8	79.3	ug/L	0.629	74.0
Aniline	1123370	6760	7050	12500	70.0 - 130	54.1 *	56.4 *	ug/L	4.16	50.0
Anthracene	1123370	9.54	10.3	12.5	27.0 - 133	76.3	82.4	ug/L	7.69	66.0
Benzidine	1123370	0.830	0.290	12.5	0.100 - 36.9	6.64	2.32	ug/L	96.4 *	90.0
Benzo(a)anthracene	1123370	10.1	10.6	12.5	33.0 - 143	80.8	84.8	ug/L	4.83	53.0

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LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Benzo(a)pyrene	1123370	9.62	10.3	12.5	17.0 - 163	77.0	82.4	ug/L	6.78	72.0
Benzo(b)fluoranthene	1123370	9.52	9.98	12.5	24.0 - 159	76.2	79.8	ug/L	4.62	71.0
Benzo(ghi)perylene	1123370	11.4	11.7	12.5	0.100 - 219	91.2	93.6	ug/L	2.60	97.0
Benzo(k)fluoranthene	1123370	10.1	11.8	12.5	11.0 - 162	80.8	94.4	ug/L	15.5	63.0
Benzyl Butyl phthalate	1123370	13.3	14.0	12.5	0.100 - 152	106	112	ug/L	5.50	60.0
Bis(2-chloroethoxy)methane	1123370	10.6	10.1	12.5	33.0 - 184	84.8	80.8	ug/L	4.83	54.0
Bis(2-chloroisopropyl)ether	1123370	9.61	9.45	12.5	12.0 - 158	76.9	75.6	ug/L	1.70	108
Bis(2-chloroisopropyl)ether	1123370	9.85	9.68	12.5	36.0 - 166	78.8	77.4	ug/L	1.79	76.0
Bis(2-ethylhexyl)phthalate	1123370	14.4	15.7	12.5	8.00 - 158	115	126	ug/L	9.13	82.0
Chrysene (Benzo(a)phenanthrene)	1123370	10.2	10.9	12.5	17.0 - 168	81.6	87.2	ug/L	6.64	87.0
Dibenz(a,h)anthracene	1123370	10.6	10.6	12.5	0.100 - 227	84.8	84.8	ug/L	0	126
Diethyl phthalate	1123370	10.2	10.3	12.5	0.100 - 120	81.6	82.4	ug/L	0.976	100
Dimethyl phthalate	1123370	10.7	10.9	12.5	0.100 - 120	85.6	87.2	ug/L	1.85	183
Di-n-butylphthalate	1123370	10.9	11.3	12.5	1.00 - 120	87.2	90.4	ug/L	3.60	47.0
Di-n-octylphthalate	1123370	12.7	14.1	12.5	4.00 - 146	102	113	ug/L	10.2	69.0
Fluoranthene(Benzo(j,k)fluorene)	1123370	8.22	9.10	12.5	26.0 - 137	65.8	72.8	ug/L	10.1	66.0
Fluorene	1123370	9.42	8.92	12.5	59.0 - 121	75.4	71.4	ug/L	5.45	38.0
Hexachlorobenzene	1123370	9.89	9.38	12.5	0.100 - 152	79.1	75.0	ug/L	5.32	55.0
Hexachlorobutadiene	1123370	5.50	5.15	12.5	24.0 - 120	44.0	41.2	ug/L	6.57	62.0
Hexachlorocyclopentadiene	1123370	4.95	5.88	12.5	3.97 - 68.7	39.6	47.0	ug/L	17.1	50.0
Hexachloroethane	1123370	6.02	5.94	12.5	40.0 - 120	48.2	47.5	ug/L	1.46	52.0
Indeno(1,2,3-cd)pyrene	1123370	10.6	10.6	12.5	0.100 - 171	84.8	84.8	ug/L	0	99.0
Isophorone	1123370	9.51	9.45	12.5	21.0 - 196	76.1	75.6	ug/L	0.659	93.0
Naphthalene	1123370	8.38	8.02	12.5	21.0 - 133	67.0	64.2	ug/L	4.27	65.0
Nitrobenzene	1123370	9.82	9.26	12.5	35.0 - 180	78.6	74.1	ug/L	5.89	62.0
n-Nitrosodiethylamine	1123370	9.08	9.19	12.5	18.0 - 100	72.6	73.5	ug/L	1.23	50.0
N-Nitrosodimethylamine	1123370	6.81	7.02	12.5	30.2 - 74.9	54.5	56.2	ug/L	3.07	50.0
n-Nitroso-di-n-butylamine	1123370	9.13	9.24	12.5	48.4 - 98.5	73.0	73.9	ug/L	1.23	50.0
N-Nitrosodi-n-propylamine	1123370	9.57	9.45	12.5	0.100 - 230	76.6	75.6	ug/L	1.31	87.0
N-Nitrosodiphenylamine (as DPA	1123370	11.2	10.9	12.5	49.3 - 94.2	89.6	87.2	ug/L	2.71	50.0
p-Chloro-m-Cresol (4-Chloro-3-me	1123370	9.26	9.52	12.5	22.0 - 147	74.1	76.2	ug/L	2.79	70.0
Pentachlorobenzene	1123370	7.91	7.85	12.5	39.3 - 93.7	63.3	62.8	ug/L	0.793	50.0
Pentachlorophenol	1123370	9.96	10.9	12.5	14.0 - 176	79.7	87.2	ug/L	8.99	86.0
Phenanthrene	1123370	10.4	10.7	12.5	54.0 - 120	83.2	85.6	ug/L	2.84	39.0
Phenol	1123370	4.83	4.79	12.5	5.00 - 120	38.6	38.3	ug/L	0.780	64.0
Pyrene	1123370	12.6	13.3	12.5	52.0 - 120	101	106	ug/L	4.83	49.0
Pyridine	1123370	7.99	6.84	12.5	11.2 - 50.6	63.9 *	54.7 *	ug/L	15.5	50.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	625306	CCV	44300	100000	ug/L	44.3	10.0 - 150	126472015
2-Fluorophenol-SURR	625306	CCV	53500	100000	ug/L	53.5	10.0 - 150	126472015
4-Terphenyl-d14-SURR	625306	CCV	56500	50000	ug/L	113	30.0 - 150	126472015
Nitrobenzene-d5-SURR	625306	CCV	53100	50000	ug/L	106	30.0 - 150	126472015
Phenol-d6-SURR	625306	CCV	49000	100000	ug/L	49.0	10.0 - 150	126472015

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Surrogate								
Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	1123370	Blank	54.5	100	ug/L	54.5	10.0 - 150	126472016
2,4,6-Tribromophenol	1123370	LCS	50.5	100	ug/L	50.5	10.0 - 150	126472017
2,4,6-Tribromophenol	1123370	LCS Dup	54.4	100	ug/L	54.4	10.0 - 150	126472018
2-Fluorophenol-SURR	1123370	Blank	35000	100000	ug/L	35.0	10.0 - 150	126472016
2-Fluorophenol-SURR	1123370	LCS	33200	100000	ug/L	33.2	10.0 - 150	126472017
2-Fluorophenol-SURR	1123370	LCS Dup	31900	100000	ug/L	31.9	10.0 - 150	126472018
4-Terphenyl-d14-SURR	1123370	Blank	37600	50000	ug/L	75.2	30.0 - 150	126472016
4-Terphenyl-d14-SURR	1123370	LCS	22800	50000	ug/L	45.6	30.0 - 150	126472017
4-Terphenyl-d14-SURR	1123370	LCS Dup	23700	50000	ug/L	47.4	30.0 - 150	126472018
Nitrobenzene-d5-SURR	1123370	Blank	35200	50000	ug/L	70.4	30.0 - 150	126472016
Nitrobenzene-d5-SURR	1123370	LCS	19800	50000	ug/L	39.6	30.0 - 150	126472017
Nitrobenzene-d5-SURR	1123370	LCS Dup	18500	50000	ug/L	37.0	30.0 - 150	126472018
Phenol-d6-SURR	1123370	Blank	26200	100000	ug/L	26.2	10.0 - 150	126472016
Phenol-d6-SURR	1123370	LCS	24500	100000	ug/L	24.5	10.0 - 150	126472017
Phenol-d6-SURR	1123370	LCS Dup	24200	100000	ug/L	24.2	10.0 - 150	126472018
2,4,6-Tribromophenol	2305623	Unknown	62.7	106	ug/L	59.2	10.0 - 150	126472019
2-Fluorophenol-SURR	2305623	Unknown	40.7	106	ug/L	38.4	10.0 - 150	126472019
4-Terphenyl-d14-SURR	2305623	Unknown	43.4	53.2	ug/L	81.6	30.0 - 150	126472019
Nitrobenzene-d5-SURR	2305623	Unknown	35.0	53.2	ug/L	65.8	30.0 - 150	126472019
Phenol-d6-SURR	2305623	Unknown	31.0	106	ug/L	29.2	10.0 - 150	126472019

Analytical Set

1123135

SM 4500-P E-2011

AWRL/LOQ C											
<u>Parameter</u>		<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>		<u>File</u>			
Phosphorus (as P), total		0.0639	0.060	mg/L	106	70.0 - 130		126425460			
Blank											
<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>			<u>File</u>			
Phosphorus (as P), total	1123135	ND	0.010	0.030	mg/L			126425459			
CCV											
<u>Parameter</u>		<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>		<u>File</u>			
Phosphorus (as P), total		0.305	0.300	mg/L	102	90.0 - 110		126425461			
Phosphorus (as P), total		0.300	0.300	mg/L	100	90.0 - 110		126425476			
Phosphorus (as P), total		0.300	0.300	mg/L	100	90.0 - 110		126425489			
LCS Dup											
<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>		<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Phosphorus (as P), total	1123135	0.297	0.319		0.300	80.0 - 120	99.0	106	mg/L	7.14	20.0
MSD											
<u>Parameter</u>	<u>Sample</u>	<u>MS</u>	<u>MSD</u>	<u>UNK</u>	<u>Known</u>	<u>Limits</u>	<u>MS%</u>	<u>MSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Phosphorus (as P), total	2305933	0.128	0.134	0.100	0.150	70.0 - 130	18.7 *	22.7 *	mg/L	19.4	20.0

Analytical Set

1123173

SM 2320 B-2011

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Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Alkalinity (as CaCO3)	1123173	ND	1.00	1.00	mg/L	126425785

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Alkalinity (as CaCO3)	27.3	25.0	mg/L	109	90.0 - 110	126425784
Total Alkalinity (as CaCO3)	24.9	25.0	mg/L	99.6	90.0 - 110	126425798
Total Alkalinity (as CaCO3)	24.9	25.0	mg/L	99.6	90.0 - 110	126425811

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Total Alkalinity (as CaCO3)	2305590	106	107	mg/L	0.939	20.0
Total Alkalinity (as CaCO3)	2305698	136	136	mg/L	0	20.0

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Alkalinity (as CaCO3)	26.9	25.0	mg/L	108	90.0 - 110	126425783

Mat. Spike

Parameter	Sample	Spike	Unknown	Known	Units	Recovery %	Limits %	File
Total Alkalinity (as CaCO3)	2305590	130	107	25.0	mg/L	92.0	70.0 - 130	126425788
Total Alkalinity (as CaCO3)	2305698	159	136	25.0	mg/L	92.0	70.0 - 130	126425801

Analytical Set 1123591

SM 5220 D-2011

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Chemical Oxygen Demand	434	400	mg/L	108	90.0 - 110	126436305

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Chemical Oxygen Demand	2305419	33.6	33.6	mg/L	0	20.0
Chemical Oxygen Demand	2305557	21.9	21.9	mg/L	0	20.0

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File
Chemical Oxygen Demand	1123591	216	200	mg/L	108	90.0 - 110	126436306

Mat. Spike

Parameter	Sample	Spike	Unknown	Known	Units	Recovery %	Limits %	File
Chemical Oxygen Demand	2305419	245	33.6	200	mg/L	106	80.0 - 120	126436309
Chemical Oxygen Demand	2305557	222	21.9	200	mg/L	100	80.0 - 120	126436312

Analytical Set 1123697

SM 2130 B-2011

AWRL/LOQ C

Parameter	Reading	Known	Units	Recover%	Limits%	File
Turbidity	0.350	0.300	NTU	117	70.0 - 130	126440048

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Blank								
<i>Parameter</i>	<i>PrepSet</i>	<i>Reading</i>	<i>MDL</i>	<i>MQL</i>	<i>Units</i>	<i>File</i>		
Turbidity	1123697	ND	0.300	0.300	NTU	126440046		
Duplicate								
<i>Parameter</i>	<i>Sample</i>		<i>Result</i>	<i>Unknown</i>		<i>Unit</i>	<i>RPD</i>	<i>Limit%</i>
Turbidity	2305623		3.40	3.04		NTU	11.2	20.0
Turbidity	2307012		0.580	0.520		NTU	10.9	20.0
Mat. Spike								
<i>Parameter</i>	<i>Sample</i>	<i>Spike</i>	<i>Unknown</i>	<i>Known</i>	<i>Units</i>	<i>Recovery %</i>	<i>Limits %</i>	<i>File</i>
Turbidity	2305623	44.5	3.04	40.0	NTU	104	70.0 - 130	126440052
Turbidity	2307012	41.2	0.520	40.0	NTU	102	70.0 - 130	126440065
Standard								
<i>Parameter</i>	<i>Sample</i>	<i>Reading</i>	<i>Known</i>	<i>Units</i>	<i>Recover%</i>	<i>Limits%</i>	<i>File</i>	
Turbidity	1123697	10.1	10.0	NTU	101	90.0 - 110	126440047	
Turbidity	1123697	101	100	NTU	101	90.0 - 110	126440049	
Turbidity	1123697	10.0	10.0	NTU	100	90.0 - 110	126440060	
Turbidity	1123697	10.4	10.0	NTU	104	90.0 - 110	126441062	

* Out RPD is Relative Percent Difference: $\text{abs}(r1-r2) / \text{mean}(r1,r2) * 100\%$

Recover% is Recovery Percent: $\text{result} / \text{known} * 100\%$

CCV - Continuing Calibration Verification (same standard used to prepare the curve; typically a mid-range concentration; verifies the continued validity of the calibration curve); Blank - Method Blank (reagent water or other blank matrices that contains all reagents except standard(s) and is processed simultaneously with and under the same conditions as samples; carried through preparation and analytical procedures exactly like a sample; monitors); MSD - Matrix Spike Duplicate (replicate of the matrix spike; same solution and amount of target analyte added to the MS is added to a third aliquot of sample; quantifies matrix bias and precision.); LCS Dup - Laboratory Control Sample Duplicate (replicate LCS; analyzed when there is insufficient sample for duplicate or MSD; quantifies accuracy and precision.); BFB - Bromofluorobenzene, GC/MS Tuning Compound (mass intensity used as tuning acceptance criteria.); Surrogate - Surrogate (mimics the analyte of interest but is unlikely to be found in environmental samples; added to analytical samples for QC purposes. **ANSI/ASQC E4 1994 Ref #4 TRADE QA Resources Guide.); IS Areas - Internal Standard Area (The area of the internal standard relative to a check standard. Internal Standard is a known concentration of an analyte(s) that is not a sample component or standard that is added to the sample and standard and is used to measure the relative responses of other analytes in the same sample or standard.); IS RetTime - Internal Standard Retention Time (the time the internal standard comes off the column. Internal Standard is a known concentration of an analyte(s) that is not a sample component or standard that is added to the sample and standard and is used to measure the relative responses of other analytes in the same sample or standard.); ICV - Initial Calibration Verification; CCB - Continuing Calibration Blank; AWRL/LOQ C - Ambient Water Reporting Limit/LOQ Check Std; MRL Check - Minimum Reporting Limit Check Std; LCS - Laboratory Control Sample (reagent water or other blank matrices that is spiked with a known quantity of target analyte(s) and carried through preparation and analytical procedures exactly like a sample; typically a mid-range concentration; verifies that bias and precision of the analytical process are within control limits; determines usability of the data.); LDR - Linear Dynamic Range Standard; MS - Matrix Spike (same solution and amount of target analyte added to the LCS is added to a second aliquot of sample; quantifies matrix bias.); DFTPP - GC/MS Tuning Compound

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SPAC-R
194

Lab Number

1106094

PO Number

1106094-5 Mandatory

Phone

956/543-6688

Waste Water

RETENTION POND

☐ Hand Delivered by Client to Region or LAB

Matrix: Non-Potable Water

Sample Collection Start

Date: 6/16/24 Time: 13:30

Sampler Printed Name: CAROLYN WOOD

Sampler Affiliation: SPAC

Sampler Signature:

Samples Radioactive? ☐Samples Contains Dioxin? ☐Samples Biological Hazard? ☐
☒ On Site Testing

NELAC

CI20

CI2 Res., Total(Onsite)Spec Mid

SM 4500-CI G-2011

CI2 Res., Total(Onsite)Spec Mid

Collected By: CW Date: 6/16/24 Time: 13:30 Analyzed By: RDX Date: 6/16/24 Time: 13:40

Results: NEGATIVE Units: mg/L Temp: 37.8 C Duplicate: NEGATIVE Units: mg/L Temp: 37.1 C

R1: 0.00 R2: 0.00 QC R1: 0.00 QC R2: 0.00

☐ Field CI2 Check for CNa

Field CI2 Check for CNa

Collected By: CW Date: 6/16/24 Time: 13:30 Analyzed By: RDX Date: 6/16/24 Time: 13:40

Results: NEGATIVE Units: mg/L Temp: 37.8 C Duplicate: NEGATIVE Units: mg/L Temp: 37.1 C

R1: 0.00 R2: 0.00 QC R1: 0.00 QC R2: 0.00

NELAC Short Hold

Cr6P

Hex Cr, Field Preservation

SM 3500-Cr B-2011 CAS:18540-29-9 (1.00 days)



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Hex Cr, Field Preservation

Collected By CW Date 6/6/24 Time 13:30 Analyzed By ROL Date 6/6/24 Time 13:33

NELAC Short Hold

DO

Dissolved Oxygen Onsite

SM 4500-O G-2016 (0.0104 days)

Dissolved Oxygen Onsite

Collected By CW Date 6/6/24 Time 13:30 Analyzed By ROL Date 6/6/24 Time 13:35

Results 7.07 Units mg/L Temp. 39.0 C Duplicate 7.15 Units mg/L Temp. 39.0 C

NELAC Short Hold

pH

pH (Onsite)

SM 4500-H+ B-2011 (0.0104 days)

pH (Onsite)

Collected By CW Date 6/6/24 Time 13:30 Analyzed By ROL Date 6/6/24 Time 13:38

Results 8.60 Units mg/L Temp. 39.0 C Duplicate 7.15 Units mg/L Temp. 39.0 C

S2Cr Field Sulfide Check for CNa

Field Sulfide Check for CNa

Collected By CW Date 6/6/24 Time 13:30 Analyzed By ROL Date 6/6/24 Time 13:43

Results NEGATIVE Units --- Temp. 39.0 C Duplicate NEGATIVE Units --- Temp. 39.0 C
R1 --- R2 --- QC R1 --- QC R2 ---

NELAC Short Hold

Temp

Temperature (onsite)

SM 2550 B - 2010 (0.0104 days)



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Temperature (onsite)

Collected By CW Date 6/6/19 Time 13:30 Analyzed By RL Date 13/35 Time 13:40

Results 38.0 Units °C Duplicate 38.0 Units °C

2 Amber Glass Qt w/Teflon lined lid

NELAC	ID2S	Table D-1/ D-2 Semivolatiles Exp	EPA 625.1 (7.00 days)
NELAC	PCB	Polychlorinated Biphenyls	EPA 608.3 (7.00 days)

2 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid

NELAC Short Hold	SAAE	Acrolein/Acrylonitrile Exp.	EPA 624.1 (3.00 days)

2 H2SO4 to pH <2 GIQt w/Tef-lined lid

NYPE	Nonyl Phenol Expansion	ASTM D7065-11 (14.0 days)

1 H2SO4 to pH <2 GIQt w/Tef-lined lid

NELAC	HEM	Oil and Grease (HEM)	EPA 1664B (HEM) (28.0 days)

1 Polyethylene 1/2 gal (White)

NELAC Short Hold	BOD	Biochemical Oxygen Demand (BOD5)	SM 5210 B-2016 CAS:1026-3 (2.04 days)
NELAC Short Hold	BODc	BOD Carbonaceous	SM 5210 B-2016 (TCMP Inhibitor) (2.04 days)
NELAC	TSS	Total Suspended Solids	SM 2540 D-2015 (7.00 days)

0 Z -- No bottle required

	CKLM	Check Limits	
NELAC Short Hold	Cr+3	Trivalent Chromium	Calculation CAS:16065-83-1 (1.00 days)

1 HNO3 to pH <2 Polyethylene 500 mL for Metals

NELAC	*AgM	Silver, Total	EPA 200.8 5.4 CAS:7440-22-4 (180 days)
NELAC	*AlM	Aluminum, Total	EPA 200.8 5.4 CAS:7429-90-5 (180 days)



RGV Region: 2401 Village Dr. Suite C Brownsville, TX 78521

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NELAC

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NELAC	*AsM	Arsenic, Total	EPA 200.8 5.4 CAS:7440-38-2 (180 days)
NELAC	*BaM	Barium, Total	EPA 200.8 5.4 CAS:7440-39-3 (180 days)
NELAC	*BeM	Beryllium, Total	EPA 200.8 5.4 CAS:7440-41-7 (180 days)
NELAC	*CdM	Cadmium, Total	EPA 200.8 5.4 CAS:7440-43-9 (180 days)
NELAC	*CrM	Chromium, Total	EPA 200.8 5.4 CAS:7440-47-3 (180 days)
NELAC	*CuM	Copper, Total	EPA 200.8 5.4 CAS:7440-50-8 (180 days)
NELAC	*Hg	Mercury, Total	EPA 245.1 3 CAS:7439-97-6 (28.0 days)
NELAC	*NiM	Nickel, Total	EPA 200.8 5.4 CAS:7440-02-0 (180 days)
NELAC	*PbM	Lead, Total	EPA 200.8 5.4 CAS:7439-92-1 (180 days)
NELAC	*SbM	Antimony, Total	EPA 200.8 5.4 CAS:7440-36-0 (180 days)
NELAC	*SeM	Selenium, Total	EPA 200.8 5.4 CAS:7782-49-2 (180 days)
NELAC	*TlM	Thallium, Total	EPA 200.8 5.4 CAS:7440-28-0 (180 days)
NELAC	*ZnM	Zinc, Total	EPA 200.8 5.4 CAS:7440-66-6 (180 days)
	301L	Liquid Metals Digestion	EPA 200.2 2.8 (180 days)
NELAC	747L	Mercury Liquid Metals Digestion	EPA 245.1 3 (28.0 days)

3 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)

Short Hold ID2V Table D-1/D-2 Volatile Expansion EPA 624.1 (3.00 days)

2 H2SO4 to pH <2 250 ml Polyethylene

NELAC	COD	Chemical Oxygen Demand	SM 5220 D-2011 (28.0 days)
NELAC	NH ₄ N	Ammonia Nitrogen	EPA 350.1 2 (28.0 days)
	OrgN	Nitrogen, Total Organic (as N)	EPA 351.2 minus EPA 350.1 (28.0 days)
NELAC	TKN	Total Kjeldahl Nitrogen	EPA 351.2 2 CAS:7727-37-9 (28.0 days)
NELAC	TPWB	Phosphorus (as P), total	SM 4500-P E-2011 CAS:7723-14-0 (28.0 days)

1 H2SO4 to pH <2 Glass 250 mLw/Teflon lined lid

NELAC TOCL Total Organic Carbon SM 5310 C-2014 (28.0 days)



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2 NaOH to pH >12 Polyethylene 250 mL/amber

NELAC	CN ⁻	Cyanide, total	SM 4500-CN ⁻ E-2016 (14.0 days)
NELAC	CN ⁻ A	Cyanide - Available/Amenable	SM 4500-CN ⁻ G-2016 (14.0 days)
NELAC	CNCl	Cyanide After Chlorination	SM 4500-CN ⁻ G-2016 (14.0 days)

1 Polyethylene Quart

NELAC	ICL	Chloride	EPA 300.0 2.1 (28.0 days)
NELAC	IFIL	Fluoride	EPA 300.0 2.1 (28.0 days)
NELAC Short Hold	IN3L	Nitrate-Nitrogen Total	EPA 300.0 2.1 CAS:14797-55-8 (2.00 days)
NELAC	IS4L	Sulfate	EPA 300.0 2.1 (28.0 days)
NELAC	AlkT	Total Alkalinity (as CaCO ₃)	SM 2320 B-2011 (14.0 days)
NELAC Short Hold	Cr+6	Hexavalent Chromium	SM 3500-Cr B-2011 CAS:18540-29-9 (1.00 days)
NELAC	TDS	Total Dissolved Solids	SM 2540 C-2015 (7.00 days)

Ambient Conditions/Comments

Date	Time	Relinquished	Received
6/06/24	15:30	Printed Name: CAROLYN WOOD Signature: [Signature] Affiliation: SPL	Printed Name: RAE LEON Signature: [Signature] Affiliation: SPL
6/06/24	17:30	Printed Name: RAE LEON Signature: [Signature] Affiliation: SPL	Printed Name: [Blank] Signature: FedEx Affiliation: [Blank]
6/07/24	10:00	Printed Name: [Blank] Signature: FedEx Affiliation: [Blank]	Printed Name: Whitwood Signature: Whitwood Affiliation: SPL
		Printed Name: [Blank] Signature: [Blank] Affiliation: [Blank]	Printed Name: [Blank] Signature: [Blank] Affiliation: [Blank]



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Sample Received on Ice? ☒ Yes ☐ No
Cooler/Sample Secure? ☒ Yes ☐ No If Shipped: Tracking Number & Temp - See Attached

The accredited column designates accreditation by A - A2LA, N - NELAP, or Z - not listed under scope of accreditation. Unless otherwise specified, ANA-LAB shall provide these ordered services pursuant to our Standard Terms & Conditions Agreement (available for download from the welcome page at <<http://www.ana-lab.com>>). Ana-Lab personnel collect samples as specified by Ana-Lab SOP #000323.

Comments



1106094 CoC Print Group 001 of 001

FedEx Express Package US Airbill

1 From
Date: 6-6-24
Sender's Name: [Redacted]
Company: [Redacted]
Address: [Redacted]
City: [Redacted] State: TX ZIP: 75662

2 Your Internal Billing Reference

3 To Recipient's Name: [Redacted]
Company: [Redacted]
Address: [Redacted]
City: [Redacted] State: TX ZIP: 75662

4 TRK# 8171 3103 3424

SHIP DATE: 06JUN24
ACTWT: 58.75 LB
CAD: 6994257/SSFE2521
DIMB: 24x14x13 IN
BILL THIRD PARTY

TO LOGIN
SPL
2600 DUDLEY RD
KILGORE TX 75662

XS GGGG

FRI - 07 JUN 10:30A
PRIORITY OVERNIGHT

75662
3HV

6/7 1030 AMV
Date Time Tech
Temp: 1.2 1.1 C
Therm#: 7242 Corr Fact: -0.1 C

8171 3103 3424

SPAC-R

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SPACEX
Rodolfo Longoria
Space Exploration Technologies
1 Rocket Rd
Brownsville, TX 78521

Project
1092339

Report Date: 02/28/2024
Printed: 04/05/2024

RESULTS

Sample Results

2274163 Water/WQP/Annual

Received: 02/16/2024

Drinking Water

Collected by: Client
Taken: 02/15/2024

SPACEX
15:00:00

PO:

EPA 200.7 4.4

Prepared: 1105616 02/22/2024 10:00:00 Analyzed 1105831 02/22/2024 15:15:00 KBI

Parameter	Results	Units	RL	Flags	CAS	Bottle
z Calcium	80.1	mg/L	0.500		7440-70-2	03
NELAC Iron, Total	0.0798	mg/L	0.025		7439-89-6	03
NELAC Sodium	174	mg/L	0.500		7440-23-5	03

EPA 200.8 5.4

Prepared: 1105616 02/22/2024 10:00:00 Analyzed 1105841 02/22/2024 21:43:00 JC2

Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC Manganese, Total	0.00119	mg/L	0.001		7439-96-5	03

EPA 300.0 2.1

Prepared: 1105412 02/20/2024 19:05:00 Analyzed 1105412 02/20/2024 19:05:00 NAZ

Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC Chloride	213	mg/L	30.0			01
NELAC Sulfate	342	mg/L	30.0			01

SM 2320 B-2011

Prepared: 1106718 02/28/2024 09:42:00 Analyzed 1106718 02/28/2024 09:42:00 KNI

Parameter	Results	Units	RL	Flags	CAS	Bottle
z Total Alkalinity (as CaCO3)	124	mg/L	1.00			01

SM 2340 C-2011

Prepared: 1105896 02/22/2024 14:11:00 Analyzed 1105896 02/22/2024 14:11:00 SLF

Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC Total Hardness (as CaCO3)	310	mg/L	20			02

SM 2510 B-2011

Prepared: 1105536 02/21/2024 13:30:00 Analyzed 1105536 02/21/2024 13:30:00 ALH

Parameter	Results	Units	RL	Flags	CAS	Bottle



SPAC-R

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SPACE X
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Space Exploration Technologies
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Brownsville, TX 78521

Project
1092339

Report Date: 02/28/2024
Printed: 04/05/2024

2274163 Water/WQP/Annual

Received: 02/16/2024

Drinking Water

Collected by: Client
Taken: 02/15/2024

SPACE X
15:00:00

PO:

SM 2510 B-2011

Prepared: 1105536 02/21/2024 13:30:00 Analyzed 1105536 02/21/2024 13:30:00 ALH

Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC Lab Spec. Conductance at 25 C	1430	umhos/cm				01

SM 2540 C-2015

Prepared: 1105436 02/20/2024 12:00:00 Analyzed 1105436 02/20/2024 12:00:00 JMB

Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC Total Dissolved Solids	700	mg/L	50.0			01

SM 4500-H+ B-2011

Prepared: 1105537 02/21/2024 15:30:00 Analyzed 1105537 02/21/2024 15:30:00 ALH

Parameter	Results	Units	RL	Flags	CAS	Bottle
z Laboratory pH	8.2@20C	SU	2.00			01

Sample Preparation

2274163 Water/WQP/Annual

Received: 02/16/2024

02/15/2024

Prepared: 02/20/2024 09:39:30 Calculated 02/20/2024 09:39:30 CAL

z Environmental Fee (per Project) Verified

EPA 200.2 2.8

Prepared: 1105616 02/22/2024 10:00:00 Analyzed 1105616 02/22/2024 10:00:00 HLT

z Liquid Metals Digestion	50/50	ml				02

SM 2540 C-2015

Prepared: 1105103 02/20/2024 12:00:00 Analyzed 1105103 02/20/2024 12:00:00 JMB

NELAC Total Dissolved Solids Started Started



SPAC-R

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SPACEX
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Project
1092339

Report Date: 02/28/2024
Printed: 04/05/2024

Qualifiers:

We report results on an As Received (or Wet) basis unless marked Dry Weight.

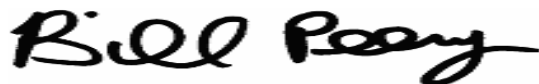
Unless otherwise noted, testing was performed at SPL, Inc.- Kilgore laboratory which holds International, Federal, and state accreditations. Please see our Websites for details.

(N)ELAC - Covered in our NELAC scope of accreditation

z -- Not covered by our NELAC scope of accreditation

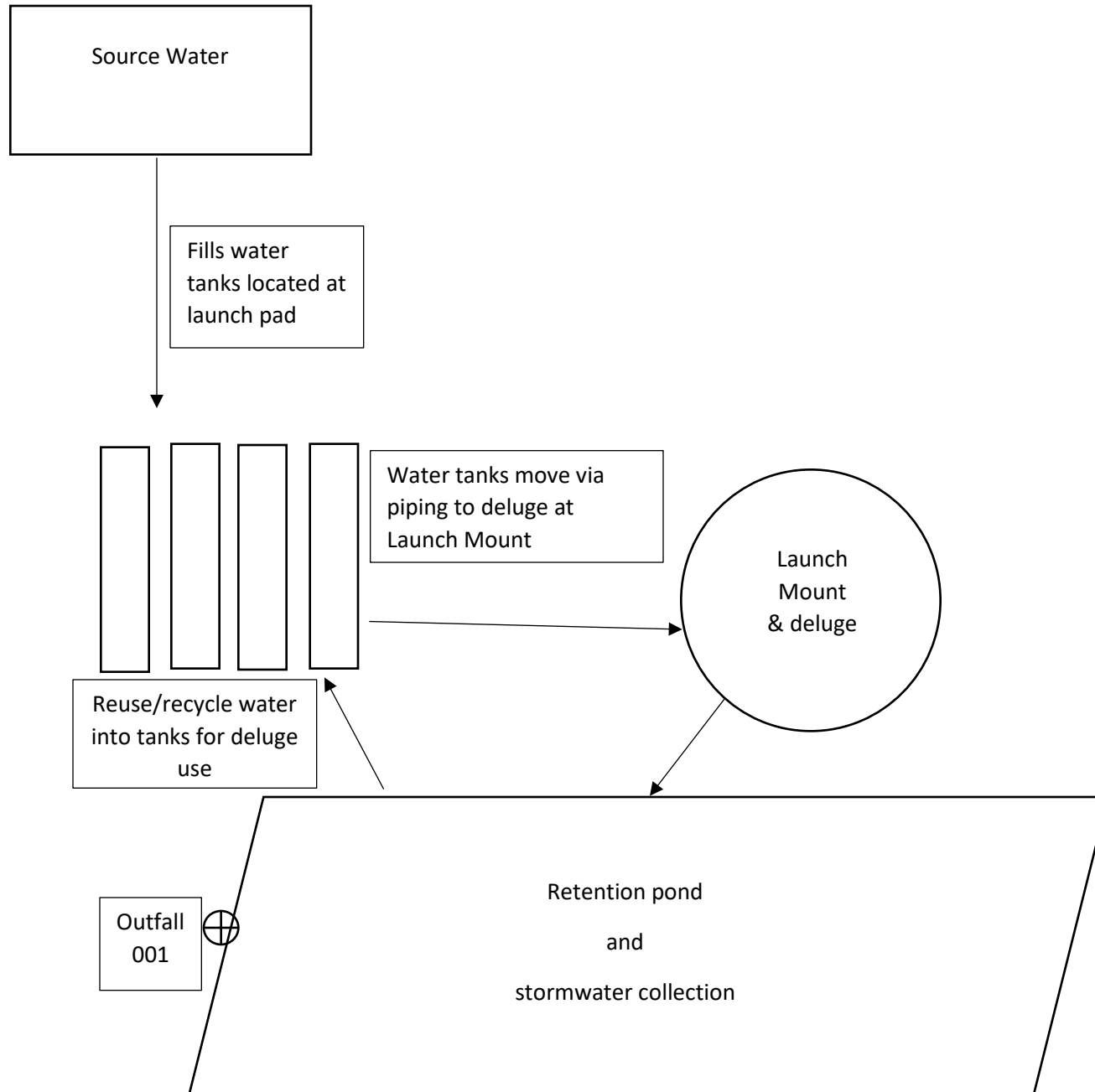
These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of SPL Kilgore. Unless otherwise specified, these test results meet the requirements of NELAC.

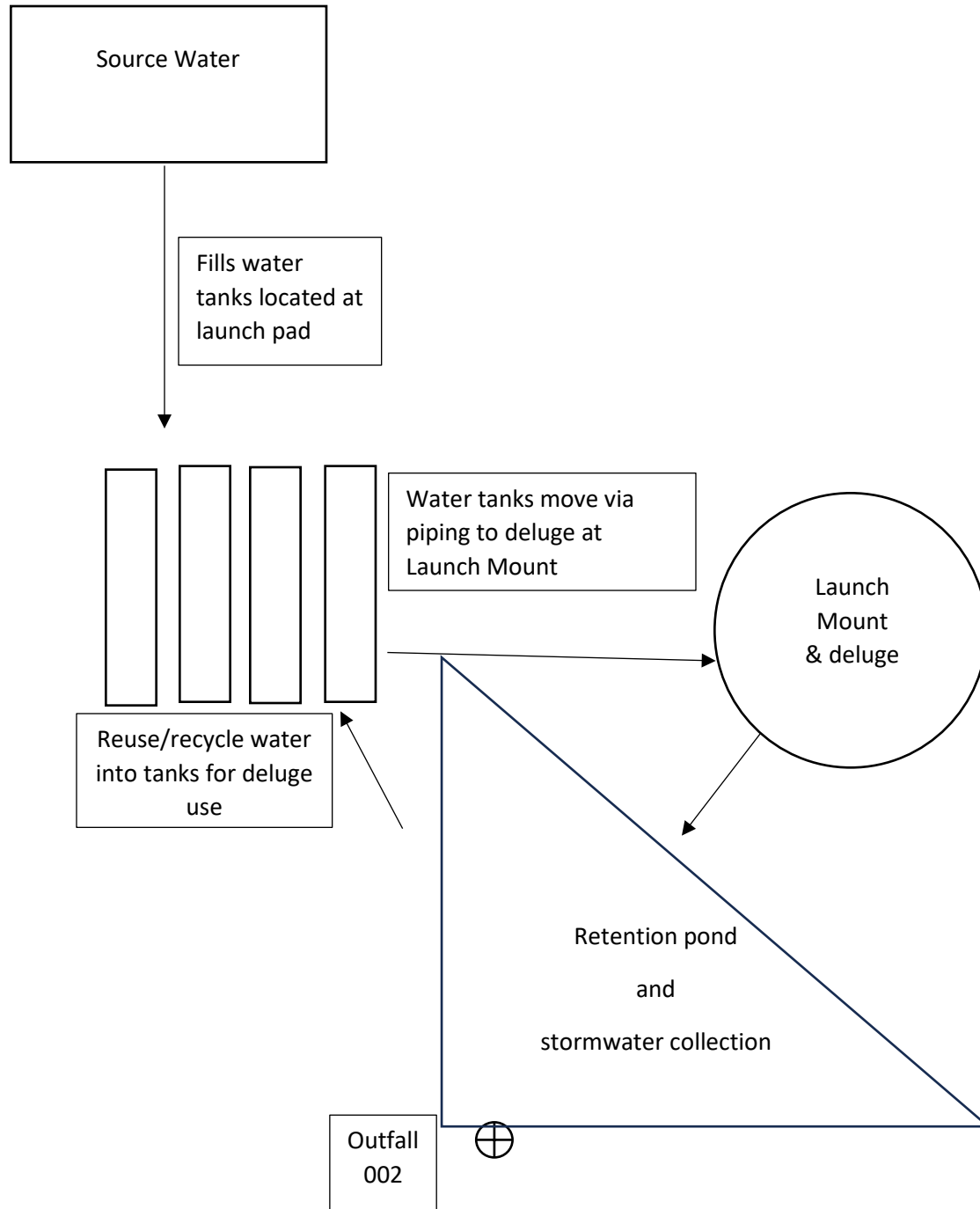
RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.



Bill Peery, MS, VP Technical Services







TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



ATTACHMENT B

Entity Name: Starbase Launch Pad Site

Investigation No.: 1995473

EPA Order CWA-06-2024-1746



March 13, 2024

TRANSMITTED VIA E-MAIL

Ms. Matthew Thompson, Sr. Director
Environmental Health and Safety
Space Exploration Corporation (SpaceX)
Rocket Road
Hawthorne, CA 90205
matthew.thompson@spacex.com

RE: Administrative Order Docket Number: CWA-06-2024-1746
Facility Identification Number: TXU009110
SpaceX

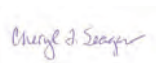
Dear Mr. Thompson:

Enclosed is an Administrative Order (AO) issued to SpaceX, for violations of the Clean Water Act (CWA) (33 U.S.C. § 1251 et seq.). Violations were identified during a review of the response to an information request issued to SpaceX on August 25, 2023. The violations alleged are for discharges to waters of the United States without a permit. The EPA requests that you immediately confirm receipt of this e-mail and the attached order by a response e-mail to vaughn.alan@epa.gov

This AO does not assess a monetary penalty; however, it does require compliance with applicable federal regulations. The first compliance deadline is within thirty days of the effective date of the AO. The Environmental Protection Agency is committed to ensuring compliance with the requirements of the CWA and National Pollutant Discharge Elimination System (NPDES) program and my staff will assist you in any way possible. Please reference AO Docket Number CWA-06-2024-1746 and Facility Identification Number TXU009110 on your response.

If you have any questions, please contact Mr. Alan Vaughn of my staff, at (214) 665-7487 or vaughn.alan@epa.gov.

Sincerely,

 Digitally signed by Cheryl T. Seager
Seager
Date: 2024.03.13 15:24:28 -05'00'

Cheryl T. Seager, Director
Enforcement and
Compliance Assurance Division

Enclosure:

ec: kristy.deaver@tceq.texas.gov
david.ramirez@tceq.texas.gov

Sarah Banco, Sr. Director, Legal
sarah.banco@spacex.com

Joseph Smith, Counsel Environmental
joseph.smith@spacex.com



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 •

FINDINGS OF VIOLATION AND COMPLIANCE ORDER

Docket Number: CWA-06-2024-1746

Facility Identification Number: TXU009110

STATUTORY AUTHORITY

The following findings are made, and Order issued, under the authority vested in the Administrator of the United States Environmental Protection Agency (EPA), Section 309(a) of the Clean Water Act (the Act), 33 U.S.C. § 1319(a). The Administrator of EPA delegated the authority to issue this Order to the Regional Administrator of EPA Region 6, who delegated this authority to the Director of the Enforcement and Compliance Assurance Division.

FINDINGS

1. Space Exploration Technologies Corporation (Respondent) is a "person," as that term is defined at Section 502(5) of the Act, 33 U.S.C. § 1362(5), and 40 C.F.R. 122.2.
2. At all times relevant to this Order (all relevant times), Respondent owned or operated the SpaceX Boca Chica launch site (facility) located at Boca Chica Boulevard, Boca Chica Village, Cameron County, Texas, (Latitude 25.996454; Longitude -97.154724) and was, therefore, an "owner or operator" within the meaning of 40 C.F.R. § 122.2.
3. At all relevant times, either the water deluge system or liquid oxygen tank at the facility was a "point source" of a "discharge" of "pollutants" to wetlands bordering the facility. The wetlands bordering the facility are "navigable waters" as defined in Clean Water Act Section 502(7) and thus "waters of the United States" because they have a continuous surface connection to a traditional navigable water, the Rio Grande.
4. Because Respondent owned or operated a facility that is a point source of discharges of pollutants to waters of the United States, Respondent and the facility were subject to the Act and the National Pollutant Discharge Elimination System (NPDES) program.
5. Under Section 301 of the Act, 33 U.S.C. § 1311, it is unlawful for any person to discharge any pollutant from a point source to waters of the United States, except as authorized under the Act by, for example, an NPDES permit issued pursuant to Section 402 of the Act, 33 U.S.C. § 1342.
6. Section 402(a) of the Act, 33 U.S.C. § 1342(a), provides that the Administrator of EPA may issue permits under the NPDES program for the discharge of pollutants from point sources to waters of the United States. Any such discharge is subject to the specific terms and conditions prescribed in the applicable permit.
7. Section 402 of the Act, 33 U.S.C. § 1342, authorizes states to request approval from EPA to administer their own permit programs for discharges to navigable waters within their jurisdiction. Pursuant to this provision, the State of Texas requested approval from EPA to administer its own permit program for discharges to navigable waters within Texas, and such approval was granted by EPA on September 14, 1998. Therefore, pursuant to the State's permit program, the Texas Commission on Environmental Quality (TCEQ) issues Texas Pollutant Discharge Elimination System (TPDES) permits. Violation of a TPDES permit is a violation of Section 301(a) of the Act, 33 U.S.C. § 1311(a).
8. Respondent does not have a TPDES Permit (permit) issued under Section 402 of the Act, 33 U.S.C. § 1342. At all relevant times, Respondent was not authorized to discharge pollutants from the facility to waters of the United States.
9. On August 25, 2023, EPA transmitted, via e-mail, an information request letter pursuant to Section 308 of the Act. The letter, signed on August 23, 2023, requested information regarding discharges from the facility to the wetlands bordering the facility.

10. On September 18, 2023, a response to the information request was received by EPA, via e-mail. Discharge volume and locations cited in Numbers 11 through 13 were provided by the Respondent.

11. On July 11, 2022, Respondent had a liquid oxygen spill which discharged 36,000 gallons of liquid oxygen to the wetlands bordering the launch pad and adjacent to the Rio Grande.

12. On July 28, 2023, Respondent conducted the first full-up test of the launch pad water deluge system. An estimated 114,000 gallons of water was used in the test. Approximately, 45,300 gallons of the deluge water discharged to the wetlands bordering the launch pad and adjacent to the Rio Grande.

13. On August 6, 2023, Respondent conducted a static fire of starship super heavy booster with the water deluge system. An estimated 194,500 gallons of water was used in the test. An estimate 78,500 gallons were not captured. Its estimated 41,500 gallons of the 78,500 gallons were vaporized by heat and aerodynamic forces from the engines firing. Approximately 37,000 gallons from the water deluge system discharged to the wetlands bordering the launch pad and adjacent to the Rio Grande.

14. On November 18, 2023, Respondent launched its Starship rocket from the facility. Respondent utilized the water deluge system during the launch. An unknown volume of water from the deluge system discharged to the wetlands adjacent to the Rio Grande. On March 14, 2024, another launch is scheduled.

15. Each unauthorized discharge and each day an unauthorized discharge occurs, is a violation of Section 301 of the Act, 33 U.S.C. § 1311.

SECTION 309(a)(3) COMPLIANCE ORDER

16. Based on the foregoing Findings and pursuant to the authority of Section 309(a)(3) of the Act, 33 U.S.C. § 1319(a)(3), EPA hereby orders Respondent to take the following action:

A. Take such measures necessary to eliminate unpermitted discharges to waters of the United States.

B. Within thirty (30) days of the effective date of this Order, Respondent shall submit a list of the specific actions taken to eliminate the unpermitted discharges.

C. Within thirty (30) days of the effective date of this Order, Respondent shall provide the following information associated with the November 18, 2023, Starship rocket launch and any launches since:

1. Volume of water used by the water deluge system.
2. Volume of water captured by the launch pad basins.
3. Volume of water not captured.
4. Volume of water discharged to the wetlands adjacent to the Rio Grande.

D. Within thirty (30) days of the effective date of this Order, Respondent shall submit a permit application to the TCEQ to acquire a permit to discharge to waters of the United States if Respondent plans on additional discharges.

E. In the event the Respondent believes complete correction of the violations cited herein is not possible within thirty (30) days of the effective date of this Order, Respondent shall, within thirty (30) days of the effective date of this Order, submit a comprehensive written plan for the elimination of the cited violations within the shortest possible time. Such plan shall describe in detail the specific corrective actions to be taken and why such actions are sufficient to correct the violations. The plan shall include a detailed schedule for the elimination of the violations within the shortest possible time, as well as measures to prevent these or similar violations from recurring.

F. Any information or correspondence submitted by Respondent to EPA under this Order shall be submitted, via e-mail, to the following:

Mr. Alan Vaughn
vaughn.alan@epa.gov

GENERAL PROVISIONS

Respondent may seek federal judicial review of the Order pursuant to Chapter 7 of the Administrative Procedure Act, 5 U.S.C. §§ 701-706.

Issuance of this Section 309(a)(3) Compliance Order shall not be deemed an election by EPA to waive any administrative, judicial, civil, or criminal action to seek penalties, fines, or other relief under the Act for the violations cited herein, or other violations that become known to EPA. EPA reserves the right to seek any remedy available under the law that it deems appropriate.

Failure to comply with this Section 309(a)(3) Compliance Order or the Act may result in further administrative action, or a civil judicial action initiated by the United States Department of Justice.

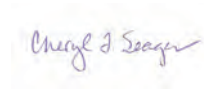
For purposes of the identification requirement in Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), and 26 C.F.R. § 1.162-21(b)(2), performance of Paragraph 16 is restitution, remediation, or required to come into compliance with the law.

Compliance with the terms and conditions of this Order does not relieve Respondent of its obligation to comply with any applicable federal, state, or local law or regulation.

The effective date of this Order is the date it is received by Respondent.

March 13, 2024

Date



Digitally signed by Cheryl T.
Seager
Date: 2024.03.13 15:23:27
-05'00'

Cheryl T. Seager, Director
Enforcement and
Compliance Assurance Division

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



ATTACHMENT C

Entity Name: Starbase Launch Pad Site

Investigation No.: 1995473

Compliance History Report



Compliance History Report

Compliance History Report for CN602867657, RN111606745, Rating Year 2024 which includes Compliance History (CH) components from September 1, 2019, through August 31, 2024.

Customer, Respondent, or Owner/Operator:	CN602867657, Space Exploration Technologies Corp.	Classification:	NOT APPLICABLE	Rating:	N/A
Regulated Entity:	RN111606745, STARBASE LAUNCH PAD SITE	Classification:	NOT APPLICABLE	Rating:	N/A
Complexity Points:	N/A	Repeat Violator:	N/A		
CH Group:	14 - Other				
Location:	LOCATED ON S SIDE OF THE EASTERN TERMINUS OF SH 4 BROWNSVILLE TX 78521 CAMERON, TX, CAMERON COUNTY				
TCEQ Region:	REGION 15 - HARLINGEN				
ID Number(s):					
STORMWATER PERMIT	TXR05GD61	STORMWATER PERMIT	TXR1515PQ		
WASTEWATER PERMIT	WQ0005462000	WASTEWATER EPA ID	TX0146251		
EMERGENCY RESPONSE ID NUMBER	R15111606745	INDUSTRIAL AND HAZARDOUS WASTE SOLID WASTE REGISTRATION # (SWR)	98370		
INDUSTRIAL AND HAZARDOUS WASTE EPA ID	TXR000086156				
Compliance History Period:	September 01, 2019 to August 31, 2024	Rating Year:	2024	Rating Date:	09/01/2024
Date Compliance History Report Prepared:	July 29, 2024				
Agency Decision Requiring Compliance History:	Enforcement				
Component Period Selected:	September 01, 2018 to July 26, 2024				
TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.					
Name:	Jonathan Diaz		Phone:	(956) 430-6038	

Site and Owner/Operator History:

1) Has the site been in existence and/or operation for the full five year compliance period?	NO
2) Has there been a (known) change in ownership/operator of the site during the compliance period?	NO

Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:

N/A

B. Criminal convictions:

N/A

C. Chronic excessive emissions events:

N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):

Item 1	February 01, 2024	(1904680)

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):

A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

N/A

F. Environmental audits:

N/A

G. Type of environmental management systems (EMSs):

N/A

H. Voluntary on-site compliance assessment dates:

N/A

I. Participation in a voluntary pollution reduction program:

N/A

J. Early compliance:

N/A

Sites Outside of Texas:

N/A

Executive Summary – Enforcement Matter – Case No. 66536
Space Exploration Technologies Corp.
RN111606745
Docket No. 2024-1282-IWD-E

Order Type:

1660 Agreed Order

Findings Order Justification:

N/A

Media:

IWD

Small Business:

No

Location(s) Where Violation(s) Occurred:

Starbase Launch Pad Site, located on the south side of the eastern terminus of State Highway 4, Brownsville, Cameron County

Type of Operation:

Wastewater treatment facility

Other Significant Matters:

Additional Pending Enforcement Actions: No

Past-Due Penalties: No

Other: N/A

Interested Third-Parties: The complainants and commenters have expressed interest in this matter.

Texas Register Publication Date: August 30, 2024

Comments Received: Yes, two public comments were received by: Daryll Silva, a private citizen; and by Perales, Allmon & Ice on behalf of Save RGV, Carrizo/Comecrudo Nation of Texas, South Texas Environmental Justice Network, and Clean Water Action.

Penalty Information

Total Penalty Assessed: \$3,750

Amount Deferred for Expedited Settlement: \$750

Total Paid to General Revenue: \$3,000

Total Due to General Revenue: \$0

Payment Plan: N/A

Compliance History Classifications:

Person/CN - Satisfactory

Site/RN - Unclassified

Major Source: No

Statutory Limit Adjustment: N/A

Applicable Penalty Policy: January 2021

Executive Summary – Enforcement Matter – Case No. 66536
Space Exploration Technologies Corp.
RN111606745
Docket No. 2024-1282-IWD-E

Investigation Information

Complaint Date(s): August 6, 2023, August 17, 2023, August 23, 2023, November 19, 2023, November 22, 2023, December 4, 2023, December 6, 2023, December 8, 2023, December 15, 2023, February 6, 2024, March 18, 2024, June 8, 2024

Complaint Information: Alleged the Respondent was not operating with an authorized wastewater permit. Industrial runoff was discharging into nearby wetlands and neighboring private property.

Date(s) of Investigation: July 25, 2024 through July 30, 2024

Date(s) of NOE(s): August 2, 2024

Violation Information

Failed to obtain authorization to discharge industrial wastewater into or adjacent to any water in the state. Specifically, the Respondent has been operating the Facility and discharging industrial wastewater without proper authorization. Industrial wastewater was discharged without a Texas Pollutant Discharge Elimination System permit on March 14, 2024, April 5, 2024, May 8, 2024, and July 26, 2024 [30 TEX. ADMIN. CODE § 305.42(a)].

Corrective Actions/Technical Requirements

Corrective Action(s) Completed:

By July 1, 2024, the Respondent implemented the following corrective measures at the Site: submitted an administratively complete permit application for an industrial wastewater individual permit, proposing to authorize discharges of wastewater associated to the Facility's water deluge system. Subsequently, TCEQ conducted a technical review of the application and determined that the proposed activities do not cause adverse risk to the environment.

Technical Requirements:

The Order will require the Respondent to:

a. Immediately, or until such a time that authorization to discharge is obtained or until 300 days, whichever is earlier, continue to operate the Facility under the following conditions:

Executive Summary – Enforcement Matter – Case No. 66536
Space Exploration Technologies Corp.
RN111606745
Docket No. 2024-1282-IWD-E

i. Any discharge of deluge water must meet the effluent limitations in the table below.

Volume: Intermittent and flow-variable.

Effluent Characteristics	Discharge Limitations
	Daily Maximum mg/L
Chemical Oxygen Demand	200
Oil & Grease	15

ii. Additional sampling should be conducted and/or data should be collected for the following parameters: Flow; Temperature; Total Copper; Total Mercury; Total Thallium; and Total Zinc.

iii. Sampling should occur within one hour, or at the earliest practicable time, following the conclusion of the launch event.

iv. Ensure that the pH of the discharge is not less than 6.0 standard units nor greater than 9.0 standard units. Monitoring must be no less than once per day when discharge occurs.

v. Effluent monitoring samples must be taken at the following locations.

(1) Outfall 001.

(2) Any other area where a discharge occurs that does not flow through Outfall 001.

b. All sampling results should be maintained at the Facility and made available upon request by TCEQ staff.

c. Respond completely and adequately, as determined by the TCEQ, to all requests for information concerning the permit application within 30 days after the date of such requests or by any other deadline specified in writing.

d. Within 315 days, submit written certification that authorization to discharge has been obtained to demonstrate compliance.

Executive Summary – Enforcement Matter – Case No. 66536
Space Exploration Technologies Corp.
RN111606745
Docket No. 2024-1282-IWD-E

Contact Information

TCEQ Attorney: N/A

TCEQ Enforcement Coordinator: Mistie Gonzales, Enforcement Division, Enforcement Team 1, MC R-09, (254) 761-3056; Michael Parrish, Enforcement Division, MC 219, (512) 239-2548

Respondent: Katy Groom, Manager, Environmental Regulatory Affairs, Space Exploration Technologies Corp., 1 Rocket Road, Brownsville, Texas 78521
Sheila McCorkle, Vice President – Starship Legal and Regulatory, Space Exploration Technologies Corp., 1 Rocket Road, Brownsville, Texas 78521

Respondent's Attorney: N/A

TCEQ Interoffice Memorandum

To: Commissioners

From: AS Amy Settemeyer, Deputy Director, Enforcement Division

Date: October 7, 2024

Subject: Response to Comment Received Concerning Proposed Agreed Enforcement Order
Space Exploration Technologies Corp.
Cameron County; RN111606745; Enforcement Case No. 66536
Docket No. 2024-1282-IWD-E

In response to a publication in the *Texas Register* on August 30, 2024, two (2) comments have been received regarding a proposed agreed enforcement order requiring certain actions of Space Exploration Technologies Corp. (the Respondent). The comments were received within the comment period.

The proposed agreed order includes one violation documented during a record review investigation conducted from July 25, 2024, through July 30, 2024. The Executive Director alleges that the Respondent failed to obtain authorization to discharge industrial wastewater into or adjacent to any water in the state. The proposed order recognizes that the Respondent submitted an administratively complete permit application for an industrial wastewater individual permit, which proposes to authorize discharges of wastewater associated to the facility's water deluge system. The proposed order further recognizes that a technical review of the application was completed, and it was determined that the proposed activities do not cause adverse risk to the environment.

No changes to the proposed agreed order were made in response to the comments. Our responses to the comments are provided below.

- Comment - TCEQ disregarded ongoing violations and complaints from the public for nearly one year, so the comment period should be extended following notice provided in Spanish.

Response: TCEQ had an ongoing investigation of the Respondent's activities in response to complaints received in the Harlingen Regional Office. During the period between late 2023 and when TCEQ's Harlingen Regional Office issued a Notice of Enforcement to the Respondent, investigative staff was working closely with the Respondent to obtain information and determine what permitting requirements were necessary. The Respondent submitted its application for an individual wastewater permit once notified by TCEQ that such a permit was required.

The commenter requests that notice of the proposed order be re-published for public comment, for an extended 60-day period, and in Spanish, citing to TCEQ rule 30 Tex. Admin. Code § 39.426 for analogous support. As they identify, however, the cited rule for public notice alternative language requirements applies to procedures governing permit applications; not enforcement orders. There is no TCEQ rule that requires a 60-day public comment period. To the contrary, TCEQ rule 30 Tex. Admin. Code § 70.10(c) states that public comment periods for proposed agreed orders are for 30 days. Notice of this proposed order was published in the Texas Register on August 30, 2024, and the comment period closed on October 1, 2024.

TCEQ Interoffice Memorandum

Additionally, there is no statutory requirement for the TCEQ to publish notice for a proposed enforcement agreed order in Spanish, and it is not agency practice to do so. However, if an individual requested a copy of the proposed agreed order in Spanish, TCEQ would take necessary steps to reasonably accommodate any such request. No such request has been received by TCEQ.

- Comment – The agreed order is not a Texas Pollutant Discharge Elimination System (TPDES) permit or substitute for a TPDES permit, and may not legally authorize discharges subject to the Clean Water Act.

Response: In accordance with Texas Water Code § 7.073, if a person violates any statute or rule within TCEQ's jurisdiction, the commission may: (1) assess against the person an administrative penalty under this subchapter; and (2) order the person to take corrective action. In this proposed order, TCEQ is requiring the Respondent to implement specific corrective actions that are necessary to resolve its violation, and which are appropriate against a backdrop of the Respondent's administratively complete application for an individual TPDES permit to authorize the discharges. The agreed order's specific corrective actions include ensuring that specific effluent limitations are met and conducting sampling when discharge occurs. TCEQ has determined that the effluent limitations and sampling requirements within the proposed agreed order are adequate given the unique, periodic, and intermittent nature of the Respondent's discharges. Additionally, during TCEQ's technical review of the administratively complete wastewater permit application, staff determined that the proposed activities presented no adverse risk to the environment.

- Two comments were received regarding the amount of the proposed administrative penalty.

Response: The penalty assessed in the order was calculated in accordance with statutory requirements from the Texas Water Code and TCEQ's Penalty Policy, which implements and standardizes penalty calculations that comply with those statutory requirements. As a threshold treatment, the violation at issue is best treated as a permitting failure, so it was assessed using the Programmatic Penalty Matrix, in accordance with TCEQ's Penalty Policy. The violation was also assessed through quarterly violation events, because of the nature of the Respondent's discharges.

TCEQ data and documentation show that enhancements to the penalty were not warranted for this case. Data for the Respondent show that a Compliance History penalty enhancement is not warranted. TCEQ documentation does not indicate that culpability existed, which can sometimes warrant an enhancement. On the other hand, the Respondent did submit an administratively complete application to obtain permit authorization for the subject discharges, and it began monitoring any discharge from the deluge system prior to the date that TCEQ issued a Notice of Enforcement, so a Good Faith Efforts to Comply penalty reduction was applied to the assessed penalty, in accordance with TCEQ's Penalty Policy.

TCEQ staff did consider the Respondent's economic benefit from the subject violation, as required by the Texas Water Code and instructed by TCEQ's Penalty Policy; however, no adjustment was made. Specifically, the Respondent's Economic Benefit was calculated as \$1,589 per month for the identified time period. This amount is less than \$15,000, which is an amount over which an Economic Benefit penalty enhancement would be required. On this basis, no enhancement was applied here.

TCEQ Interoffice Memorandum

In accordance with TCEQ's Penalty Policy, the Respondent was eligible to receive a 20% deferral of the assessed administrative penalty. As outlined in TCEQ's Penalty Policy, this deferral is available to entities that qualify for resolving their enforcement action through a 1660 Administrative Order, and who choose to settle expeditiously so long as: the culpability enhancement was not applied; the order does not include any statutorily mandated minimum penalties; and the respondent does not have two or more prior administrative penalty orders as set out in Texas Water Code, Section 7.105(b)(2), (b)(4) and (b)(6).

By assessing a penalty in accordance with TCEQ's Penalty Policy, the amount was determined to be necessary to deter future violations.

In summary, the commenters express concerns that the TCEQ failed to properly regulate Space Exploration Technologies Corp., enforce adequate penalties, enforce appropriate corrective actions, and facilitate meaningful public participation. Staff's position, as reflected in the response, is that the Penalty Policy was used to assess the penalty fairly. Accordingly, the Enforcement Division recommends that you adopt this proposed order.

Attachments

cc: Manager, Water Section, Harlingen Regional Office, TCEQ

From: [Darryll Silva](#)
To: waterquality@tceq.texas.gov; [Info](#); commissioner@tceq.texas.gov; waterquality@tceq.texas.gov
Subject: Inadequate Penalty for SpaceX Wastewater Mishandling
Date: Friday, August 30, 2024 12:22:40 PM

Dear TCEQ,

I am writing to express my deep concern regarding the recent fine levied on SpaceX for mishandling wastewater. While I appreciate the efforts of the TCEQ to hold businesses accountable for their environmental practices, the size of the fine imposed on SpaceX appears disproportionately small given the potential environmental impact of their actions.

Fines that are minor in comparison to a company's financial capabilities do little to deter future violations and send a message that paying a penalty is just a cost of doing business. This is particularly troubling when such actions directly affect the quality of life for Texans, who expect and deserve clean water and a safe environment. Moreover, the mishandling of wastewater does not only impact Texas but also has the potential to affect neighboring states connected by our waterways. Pollution can spread far beyond its original point, carrying harmful consequences for ecosystems and communities far downstream.

By imposing fines that are insufficient to change behavior, we risk setting a precedent that allows companies to simply pay away their environmental misdeeds. This approach undermines the health and safety of our communities, damages public trust, and diminishes the overall effectiveness of environmental regulations designed to protect us all.

I urge the TCEQ to reconsider the penalties imposed on companies like SpaceX and to establish fines that genuinely reflect the seriousness of environmental violations. We need stronger deterrents to ensure that businesses take their environmental responsibilities seriously and prioritize the well-being of all Texans and our neighbors.

Thank you for your attention to this critical matter. I hope the TCEQ will take stronger actions in the future to protect our environment and our communities.

Sincerely,
Darryll Silva



Jon Niermann, *Chairman*
Bobby Janecka, *Commissioner*
Catarina R. Gonzales, *Commissioner*
Kelly Keel, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 7, 2024

Mr. Darryll Silva
Austin, TX

via electronic communication

Re: Comment Received, Proposed Agreed Enforcement Order – Space Exploration Technologies Corp.
RN111606745; Enforcement Case No. 66536; Docket No. 2024-1282-IWD-E

Dear Mr. Silva:

On August 30, 2024, we received your comment concerning the proposed agreed order for Space Exploration Technologies Corp (the Respondent). I have forwarded your comment to our Harlingen Regional Office for their information and to our General Counsel's Office so that the Commissioners can consider your comments regarding the proposed order.

Texas Commission on Environmental Quality (TCEQ or Commission) staff and the Respondent agreed to the terms of the proposed order on August 13, 2024. Accordingly, if approved and issued by our Commission, the Respondent will be assessed an administrative penalty of \$3,750, of which \$750 has been deferred in accordance with our expedited order process and Penalty Policy.

The proposed agreed order includes one violation documented during a record review investigation conducted from July 25, 2024, through July 30, 2024. The Executive Director alleges that the Respondent failed to obtain authorization to discharge industrial wastewater into or adjacent to any water in the state. The proposed order recognizes that the Respondent submitted an administratively complete permit application for an industrial wastewater individual permit, which proposes to authorize discharges of wastewater associated to the facility's water deluge system. The proposed order further recognizes that a technical review of the application was completed, and that it was determined that the proposed activities do not cause adverse risk to the environment.

No changes to the proposed agreed order were made in response to the comments. Our responses to the comments are provided below.

- Comment – The size of the fine imposed on the Respondent appears disproportionately small given the potential environmental impact of their actions.

Response: The penalty assessed in the order was calculated in accordance with statutory requirements from the Texas Water Code and TCEQ's Penalty Policy, which implements and standardizes penalty calculations that comply with those

statutory requirements. As a threshold treatment, the violation at issue is best treated as a permitting failure, so it was assessed using the Programmatic Penalty Matrix, in accordance with TCEQ's Penalty Policy. The violation was also assessed through quarterly violation events because of the nature of the Respondent's discharges.

TCEQ data and documentation show that enhancements to the penalty were not warranted for this case. Data for the Respondent show that a Compliance History penalty enhancement is not warranted. TCEQ documentation does not indicate that culpability existed, which can sometimes warrant an enhancement. On the other hand, the Respondent did submit an administratively complete application to obtain permit authorization for the subject discharges, and it began monitoring any discharge from the deluge system prior to the date that TCEQ issued a Notice of Enforcement, so a Good Faith Efforts to Comply penalty reduction was applied to the assessed penalty, in accordance with TCEQ's Penalty Policy.

TCEQ staff did consider the Respondent's economic benefit from the subject violation, as required by the Texas Water Code and instructed by TCEQ's Penalty Policy; however, no adjustment was made. Specifically, the Respondent's Economic Benefit was calculated as \$1,589 per month for the identified time period. This amount is less than \$15,000, which is an amount over which an Economic Benefit penalty enhancement would be required. On this basis, no enhancement was applied here.

In accordance with TCEQ's Penalty Policy, the Respondent was eligible to receive a 20% deferral of the assessed administrative penalty. As outlined in TCEQ's Penalty Policy, this deferral is available to entities that qualify for resolving their enforcement action through a 1660 Administrative Order, and who choose to settle expeditiously so long as: the culpability enhancement was not applied; the order does not include any statutorily mandated minimum penalties; and the respondent does not have two or more prior administrative penalty orders as set out in Texas Water Code, Section 7.105(b)(2), (b)(4) and (b)(6).

By assessing a penalty in accordance with TCEQ's Penalty Policy, the amount was determined to be necessary to deter future violations.

- *Comment – Small fines do not deter noncompliance if they are not meaningful to a company's financial capabilities.*

Response – The Executive Director calculated the recommended penalty for this case under TCEQ's Penalty Policy, which implements directives that Texas statutory authorities require TCEQ to consider as factors, in a standardized fashion to ensure regulatory consistency and fairness. TCEQ's Penalty Policy does not instruct that penalty calculations should or can consider the financial abilities of respondents to enforcement cases, so this factor was not considered in the calculation of this recommended penalty amount.

Mr. Daryll Silva
Page 3
October 7, 2024

We appreciate your input into the enforcement action currently pending against the Respondent. The proposed agreed order will be considered at an upcoming Commissioner's Agenda. If you have further concerns or comments related to this order, please do not hesitate to call me at 512-239-2588. For environmental complaints related to the current operating conditions of the Respondent, you should contact our Harlingen Regional Office at 956-425-6010.

Thank you,

A handwritten signature in cursive script that reads "Amy Settemeyer".

Amy Settemeyer, Deputy Director
Enforcement Division
Texas Commission on Environmental Quality

cc: Manager, Water Section, Harlingen Regional Office, TCEQ

PERALES, ALLMON & ICE, P.C.
ATTORNEYS AT LAW

1206 San Antonio Street
Austin, Texas 78701
(512) 469-6000 • (512) 482-9346 (facsimile)
info@txenvirolaw.com

Of Counsel:
David Frederick
Richard Lowerre
Vic McWherter

October 1, 2024

Mistie Gonzales
Enforcement Coordinator
TCEQ Enforcement Division
P.O. Box 13087, MC 219
Austin, Texas 78711-3087

Via TCEQ eFiling and Facsimile

Re: Comments Regarding the Agreed Order between TCEQ and Space Exploration Technologies Corporation, TCEQ Docket No. 2024-1282-IWD-E.

Dear Ms. Gonzales:

Pursuant to Texas Water Code § 7.075 and on behalf of our clients, Save RGV, the Carrizo/Comecrudo Nation of Texas, Inc., the South Texas Environmental Justice Network, and Clean Water Action, we submit these comments regarding the Agreed Order (“AO”) between TCEQ and Space Exploration Technologies Corporation (“SpaceX”), notice of which was published in the Texas Register on August 30, 2024.

I. Background

SpaceX conducted its first test launch of the Starship/SuperHeavy rocket on April 20, 2023. It had no flame deflector or water deluge system in place at the time, and a disastrous explosion of the concrete launch pad ensued.¹ The resulting storm of fire, dust, and debris reached more than 385 acres of land in the area and caused extensive damage to sensitive ecosystems.

SpaceX implemented a deluge system thereafter, which Elon Musk, the founder of SpaceX, described the system as “[b]asically, a massive, super strong steel shower head pointing up.”² According to the FAA, the deluge system has the ability to disperse deluge water up to 0.6 miles across the local landscape, due to the vapor cloud and subsequent

¹ Davila, Gaige. “SpaceX is grounded after rocket explosion caused extensive environmental damage.” *Texas Public Radio*. April 27, 2023. Available at: <https://www.tpr.org/environment/2023-04-27/photos-spacex-is-grounded-after-rocket-explosion-caused-extensive-environmental-damage>.

² Chang, Kenneth. “SpaceX Shifts the 2nd Launch of Its Starship Rocket to Saturday.” *The New York Times*. Nov. 18, 2023. Available at: <https://www.nytimes.com/2023/11/16/science/spacex-starship-launch-elon-musk.html>.

condensation.³ The same FAA document indicates that SpaceX intends to activate the deluge system during each engine static fire test and vehicle launch.⁴

To date, SpaceX used the deluge system during a launch that occurred on November 18, 2023 at approximately 7:02 AM CST,⁵ again during a launch that occurred on March 14, 2024 at approximately 8:25 AM CDT,⁶ and most recently, during its June 6, 2024 Starship launch, during which it activated the deluge system twice.⁷ Additionally, SpaceX used the deluge system during at least some static fire tests. Known static fire tests in the past year have occurred on June 26, 2023, July 28, 2023, August 6, 2023, August 25, 2023, October 20, 2023, December 20, 2023, December 29, 2023, April 5, 2024, May 8, 2024, and July 26, 2024.

In March 2024, EPA entered a compliance order against SpaceX, effective March 14, 2024, the day it was received by SpaceX. On April 16, 2024, EPA communicated to SpaceX that the deluge system activities are not covered by the stormwater multi-sector general permit. SpaceX proceeded with multiple static fire tests and the June 6, 2024 launch despite EPA's compliance order and related communications knowing that use of deluge system constituted a violation of the Clean Water Act.

According to publicly available information, between August 2023 and June 2024, TCEQ received at least fourteen complaints from members of the public regarding the deluge system operating without a permit. In fact, in an email on August 3, 2023, Cari-Michel La Caille, Director of TCEQ's Office of Water, acknowledged that TCEQ was aware of SpaceX activities regarding deluge water from the rocket launch facility.⁸

On June 4, 2024, Save RGV sent a notice of intent to sue letter to SpaceX with a copy sent to TCEQ. On July 1, 2024, SpaceX filed an application with TCEQ for an individual industrial wastewater permit. Finally, on August 2, 2024, TCEQ issued a notice of enforcement to SpaceX, though the notice was not made available to the public until it was produced in response to a public information request on August 13, 2024. The proposed Agreed Order was published on August 30, 2024, giving the public only 30 days to comment.

³ "Addendum to the October 2021 Biological Assessment for the SpaceX Starship-Super Heavy Launch Vehicle Program at the SpaceX Boca Chica Launch Site in Cameron County, Texas Addressing Operation of a Deluge System" at 8-9. Federal Aviation Administration. October 2023. Available at: <https://www.faa.gov/media/72826>.

⁴ *Id.* at 1.

⁵ Available at: <https://www.spacex.com/launches/mission/?missionId=starship-flight-2>.

⁶ Available at: <https://www.spacex.com/launches/mission/?missionId=starship-flight-3>.

⁷ Available at: <https://www.spacex.com/launches/mission/?missionId=starship-flight-4>.

⁸ Attachment A, email correspondence from Cari-Michel La Caille (Aug. 3, 2023).

II. TCEQ disregarded ongoing violations and complaints from the public for nearly one year, so the comment period should be extended following notice provided in Spanish.

The record shows that TCEQ has been aware since at least August 2023 of SpaceX's unpermitted discharges from its deluge system and failed to act for nearly one year. There is no indication in publicly available documents that TCEQ responded to or acted on any of the more than one dozen complaints from the public alleging violations from the deluge system until August 2024. For these reasons and those articulated below, the public comment period on the AO should be extended for an additional 60 days beyond the date that information regarding SpaceX's economic benefit is made public, and before any decision on the AO is set for Commissioners Agenda.

Furthermore, the SpaceX Boca Chica Launch Site deluge system individual wastewater permit is subject to the alternative language notice requirements in 30 Tex. Admin. Code, Section 39.426, requiring notice in Spanish. Therefore, notice of the AO should also be provided in Spanish.

III. The AO is not a TPDES permit or substitute for a TPDES permit, and may not legally authorize discharges subject to the Clean Water Act.

The Clean Water Act requires all discharges covered by the statute must be in accordance with an NPDES permit or state-delegated permit, such as Texas's TPDES permit.⁹ It is well recognized that this requirement is "unconditional and absolute."¹⁰ The AO acknowledges that SpaceX currently lacks a permit for its discharges from the deluge system. The AO does not provide any authority for disregarding the CWA's requirement for a permit, yet it does propose to authorize SpaceX to continue to discharge from the deluge system until such time that a permit is obtained or until 300 days after the effective date of AO.¹¹ The AO is not and cannot be a substitute for the required CWA permit.¹² Therefore, Ordering Provision 2 (Subsection IV.2) should be rejected and stricken in its entirety from any approved order.

The CWA proscribes specific procedural and substantive requirements for issuance of a permit, many of which cannot be satisfied by an agreed order and have not been satisfied here

⁹ See 33 U.S.C. § 1311(a).

¹⁰ *Puget Soundkeeper All. v. Cruise Terminals of Am., LLC*, No. C14-0476-JCC, 2014 WL 4649952, at *2, n. 4 (W.D. Wash. Sept. 16, 2014).

¹¹ AO at 3 (Subsection IV.2).

¹² *Waterkeeper All., Inc. v. U.S. E.P.A.*, 399 F.3d 486 (2d Cir. 2005) ("The Clean Water Act demands regulation in fact, not only in principle."); *Montgomery Env't'l Coal., Inc. v. U.S. EPA*, 1983 U.S. App. LEXIS 27509, n.6 (D.C. Cir. 1983) (not designated for publication) (explaining that a compliance order does not relieve a permittee from its legal obligation of complying with its NPDES permit and that the permittee may still be liable under a citizen's suit).

For example, public notice and comment must be provided for a draft NPDES permit. *See* 33 U.S.C. §§ 1342(a)(3), 1342(b)(3); 40 C.F.R. § 123.25(26)-(33) (listing requirements for an approved state program), § 124.6(a) (draft permit required unless NPDES permit application denied), § 124.6(d) (draft NPDES permit must include effluent limitations), § 124.10(a)(1)(ii) (public notice of draft permit required), § 124.10(b) (at least 30 days for public comment required), § 124.11 (interested persons may submit comments and request hearing), § 124.17 (requires response to public comments by issuing agency). NPDES permits are required to have effluent limitations, *inter alia*, in both their final and draft form. 40 C.F.R. §§ 122.44, 123.25(15), 124.6(d).¹³

Of significance here is the requirement that interested persons be able to submit comments, receive a response to comments from TCEQ, and request a hearing.¹⁴ Each of these requirements are applicable to State programs. Texas has incorporated these provisions, pursuant to its delegation, and to deviate from them, except to make the requirements more stringent, would run afoul of this delegation.¹⁵

According to the AO, SpaceX has submitted an administratively complete permit application for an individual industrial wastewater permit that would cover the discharges associated with the deluge system, but this permit is not final and approved yet.¹⁶ In fact, the permit application is still subject to public comment, a public meeting having been scheduled for Thursday, October 17, 2024 at 7:00 PM in Brownsville, Texas.

It is not until after this deadline for public comments, must the Executive Director consider the comments and prepare a response to comments (“RTC”). And only after the RTC is issued, must persons request a contested case hearing. The ED may not issue final approval of the application if timely hearing requests or requests for reconsideration are filed.

The notice of SpaceX’s application indicates that discharges from the deluge system are expected to contain total dissolved solids, nitrate-nitrogen, phosphorus, sulfate, chloride, fluoride, aluminum, cadmium, chromium, copper, cyanide, and zinc.¹⁷ Elsewhere, the application indicates that the following pollutants may also be present: arsenic, barium, lead, mercury, nickel, and selenium.¹⁸ An NPDES/TPDES permit must ensure compliance with federal and state water quality standards, and affected persons have a right to request a hearing should the agency’s draft permit not comply.

¹³ *PennEnvironment v. PPG Indus., Inc.*, 964 F. Supp. 2d 429, 458 (W.D. Pa. 2013).

¹⁴ 40 C.F.R. §§ 124.11-12.

¹⁵ *See* 40 C.F.R. § 123.25(a).

¹⁶ AO at 2 (Subsection I.9).

¹⁷ Wastewater Individual Permit Application Plain Language Template at 1.

¹⁸ Wastewater Individual Permit Application Technical Report at 60-61.

Furthermore, certain technical requirements in the AO are grossly deficient and must be addressed during a permitting process, subject to public comment and hearing. For example, the requirement found in subsection IV.2.a.iii, regarding sampling is unenforceable. This provision requires that SpaceX sample within one hour of a launch event, or at the earliest practicable time following conclusion of the launch event. First, SpaceX may use the deluge system for static fire tests as well as launch events. So, the requirement to sample should be tied to use of the deluge system, not only launch events. Second, the use of the deluge system is a planned event, therefore, it is not necessary to allow for sampling to occur “at the earliest practicable time” nor is it reasonable to allow SpaceX this latitude, given its prior compliance history. Also, Subsection IV.2.b does not comply with requirements of the CWA and Commission rules because it does not comply with self-reporting requirements.¹⁹

IV. The total amount of the proposed administrative penalty serves no public purpose.

Pursuant to TCEQ Rules, the purpose of an administrative penalty is “to penalize and deter non-compliance with the commission’s rules and to recover any economic benefit resulting from the non-compliance as the commission determines is appropriate.”²⁰ The proposed penalty of \$3,750 fails to even approach accomplishing this purpose. Rather, the absurdly low figure risks the integrity of our State’s environmental agency and encourages other bad actors to approach our environmental regulations with the same disregard.

As previously explained, SpaceX knowingly and repeatedly violated the Clean Water Act by discharging from its deluge system without a permit even after it was informed by EPA that the discharge would require an individual permit. Furthermore, there is nothing in any publicly available documents that indicates the TCEQ has considered the economic benefit resulting from non-compliance, even though the non-compliance allowed SpaceX to complete three test launches and numerous static fire tests from the Boca Chica Launch Site prior to obtaining a permit. The proposed administrative penalty should be rejected and the TCEQ should request additional information necessary to determine SpaceX’s economic benefit from non-compliance.²¹ This information should be made public and the public should be allowed an additional 60 days from that date to comment, given the severity of these violations and the public interest.

Furthermore, the AO proposes to defer \$750 of the \$3,750 administrative penalty assessed and ultimately waive the \$750 upon full compliance with the terms and conditions contained in the AO.²² There is no conceivable public purpose provided by waiving any

¹⁹ See, e.g., 40 C.F.R. § 122.44, .48.

²⁰ 30 Tex. Admin. Code § 70.1(b).

²¹ 30 Tex. Admin. Code § 70.1(d) (“Nothing in this chapter shall constrain the commission from issuing an enforcement order pursuant to Texas Water Code, §7.051 that assesses an administrative penalty that is different from a penalty proposed by the executive director.”).

²² AO at 1 (Subsection I.4).

portion of SpaceX's administrative penalty upon compliance, particularly since, as previously explained, the AO cannot substitute for an NPDES permit. This leaves the only other "corrective measure" required by the AO as the submittal of the permit application itself, which will be required if SpaceX intends to comply with the Clean Water Act for *future* discharges, and thus, cannot constitute a corrective measure for *prior* discharges.

Waiving a penalty or a portion of a penalty upon full compliance is typically meant to balance accountability with practicality, and achieve goals such as: (1) encouraging actual compliance; (2) providing a second chance to the violator to rectify mistakes; (3) fostering a cooperative relationship with the permittee; (4) using limited funds to actually implement improvement projects rather than just be paid as penalty; and (5) reduce administrative burden. As should be abundantly clear at this point, none of these goals would be achieved by waiving any portion of the administrative penalty assessed to SpaceX. SpaceX must get a permit if it wants to continue to utilize its deluge system, for which it has been on notice for more than one year and, despite this notice, has continued to knowingly and openly violate the federal Clean Water Act and our State's TPDES permitting requirements. SpaceX has already placed an administrative burden on TCEQ, to its own financial benefit. Forgiving any portion of the administrative penalty undermines the integrity of our State's environmental agency. Therefore, the Commission should reject the proposed penalty, and instruct that a revised penalty be based on SpaceX's economic benefit from non-compliance and without any portion to be waived.

V. Conclusion

For the reasons described above, Save RGV, the Carrizo/Comecrudo Nation of Texas, Inc., the South Texas Environmental Justice Network, and Clean Water Action urge the Commission to deny the proposed Agreed Order, strike any authorization to allow discharges without an NPDES/TPDES permit, and reassess the administrative penalty after consideration of the economic benefit to SpaceX from its noncompliance and only after extending the public comment period 60 days from making relevant information available to the public and notice of the AO provided in Spanish.

Please contact us with any questions.

Respectfully submitted,

/s/ Lauren Ice

Marisa Perales

State Bar No. 24002750

marisa@txenvirolaw.com

Lauren Ice

State Bar No. 24092560

lauren@txenvirolaw.com

PERALES, ALLMON & ICE, P.C.

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Fax: (512) 482-9346

*Counsel for Save RGV, the
Carrizo/Comecrudo Nation of Texas,
Inc., the South Texas Environmental
Justice Network, and Clean Water Action*

ATTACHMENT A

SpaceX Boca Chica, Texas

From: Cari-Michel Lacaille (cari-michel.lacaille@tceq.texas.gov)

To: txfinder@att.net

Date: Thursday, August 3, 2023 at 12:12 PM CDT

Ms. Branch,

Thank you for your correspondence to the Texas Commission on Environmental Quality (TCEQ) dated July 31, 2023, regarding the Starbase Production Site (SpaceX at Boca Chica) located at the eastern terminus of Boca Chica Boulevard in Brownsville, Texas.

TCEQ is federally delegated by the U.S. Environmental Protection Agency to implement the Texas Pollutant Discharge Elimination System (TPDES) program to control discharges of pollutants to surface waters of the United States. TPDES permits are developed under Chapter 26 of the Texas Water Code, which authorizes TCEQ to set requirements in a permit for discharges of wastewater into surface water in the state. TCEQ prepares draft wastewater authorizations that comply with state and federal water quality rules and regulations.

The Starbase Production Site is a vertical rocket launch facility. Deluge water from rocket launches would be a type of industrial wastewater. However, the need for a permit or any other type of authorization is dependent on the site activity, wastewater quality and quantity, and disposal method. TCEQ are working with SpaceX representatives regarding activities that may require a permit or authorization. Space X is responsible for determining which, if any, wastewater authorizations are required for their facility, based on the activities at the site, and applying for the appropriate authorizations. However, TCEQ is currently evaluating the use of the pressurized water system as part of launch operations. The evaluation will determine the applicability of TCEQ regulations for the use of this system.

SpaceX at Boca Chica ([RN107697088](#)) has one active authorization listed above, MSGP [TXR05GD28](#). If you have any additional questions concerning wastewater permitting, please contact Robert Sadlier, Deputy Director of the Water Quality Division, at Robert.Sadlier@tceq.texas.gov.

Thank you,

Cari-Michel La Caille



Cari-Michel La Caille, Director
Office of Water

Texas Commission on Environmental Quality

Phone: (512)239-6479

E-Mail: cari-michel.lacaille@tceq.texas.gov

From: Mary Angela Branch <txfinder@att.net>

Sent: Monday, July 31, 2023 3:49 PM

To: COMMISSR <COMMISSR@tceq.texas.gov>; Michael Jansky <jansky.michael@epa.gov>; debra.haaland@doi.gov;

Hudson Jayson M CIV USARMY CESWG (USA) <jayson.m.hudson@usace.army.mil>; pete.buttigieg@dot.gov; Chuck CA Ardizzone <chuck_ardizzone@fws.gov>; Ernesto Reyes <ernesto_reyes@fws.gov>; Dawn Gardiner <dawn_gardiner@fws.gov>; Chris Perez <chris_perez@fws.gov>; Paul Kaspar <kaspar.paul@epa.gov>; Maria Martinez <martinez.maria@epa.gov>; chair@ceq.eop.gov; Amy B. EOP/CEQ Coyle <amy.b.coyle@ceq.eop.gov>; Amflz Vicksantiago Co Info <info@amflz.vicksantiago.co.nz>

Subject: Fw: CWA violations of SpaceX Boca Chica, Texas

Having received an out of office reply from my regional investigative and enforcement office of TCEQ Harlingen, TX, see reply below, I am forwarding to all entities in hopes of receiving an answer. This has been a years long process of asking the same questions over and over, from the same entity, TCEQ both in Austin and Harlingen, TX and receiving very vague to little answers. Now we ask that someone, someone, please take a long hard look at this situation and provide the citizens some concrete, sound, legal answers. Surely one of these regulatory agencies can provide insight. We all know what is going on there is wrong, in violation, and yet you turn a blind eye. From the federal level, to the county level, elected officials and hired regulatory officials, ALL turn a blind eye. In the wake of violent climate change, extreme degradation of sensitive wild and natural land and oceans, each entity still washes their hands of accountability. We are tired of hearing "It's not my jurisdiction." Well, the planet is all our jurisdiction and we have lost our public beach, our state park and now our national wildlife refuge.

Please review the questions below and give us some answers. If we are wrong, misinformed, or merely uneducated on permit law, we ask to be enlightened.
Thank you!

Mary Angela Branch

----- Forwarded Message -----

From: Mary Angela Branch <txfinder@att.net>

To: Jaime Garza <jaime.garza@tceq.texas.gov>; Monica Galvan <monica.galvan@tceq.texas.gov>

Cc: Jim Chapman <jchapmanrgv@gmail.com>; Molly Smith <molly.smith24@gmail.com>

Sent: Monday, July 31, 2023 at 01:25:57 PM CDT

Subject: Email follow up to my voice mail just now

Hello Jaime,

It's Angela Jones, Save RGV. Since you sent the investigative reports on June 23, 2023 from our earlier conversations and concerns regarding SpaceX at Boca Chica, this has now cropped up. (See link below.) We are all extremely concerned. Who can we contact that can explain why SpaceX was allowed to do a full pressure test on this system at the launch site last week without having the necessary permits? Can you or someone at TCEQ tell us whether this deluge system needs an individual TPDES permit? We specifically discussed this at our meeting with you and Monica back in January and emailed you further concerns as they began constructing this deluge system. We questioned, and you concurred, that deluge water is significantly different than stormwater. This appears to us to be a very clear violation of the CWA. TCEQ only has Stormwater permits on file for this facility. In speaking with you and others at TCEQ in Austin, it is evident TCEQ was very aware that this type of deluge water from the launch site did not meet the criteria for Stormwater, and according to NASA, deluge water is wastewater. In an email from Ms. Cari-Michel La Caille, director of the office of water at TCEQ, dated December 8, 2022, "Deluge wastewater from rocket launches would be a type of industrial wastewater." And in that same email she said "As of December 5, 2022, TCEQ had not received an industrial wastewater application for this site." Can you now tell us a) what type of industrial wastewater this is and b) why is this just now being "looked into?" Can you explain how something like this can occur and significantly further impact the habitat at Boca Chica and waters of the U.S. without a permit

application having been submitted in accordance with TCEQ rules? Will you or someone respond to us in a timely manner, and confirm that this is NOT a violation of the CWA and that this type of deluge system is covered under their current permits?

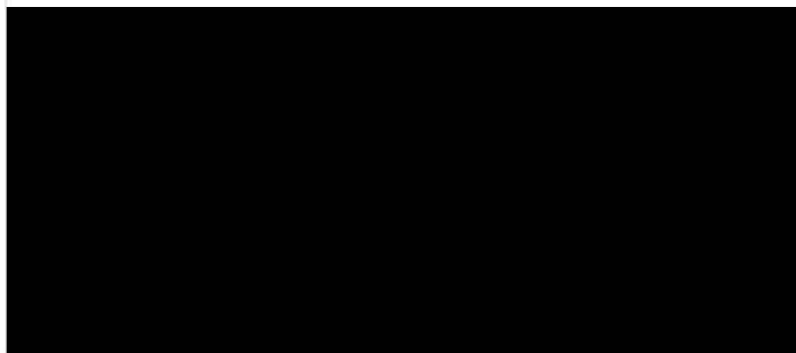
I am disheartened and quite astonished that our regulatory agency is not in front of this and that we continue to ask the same questions over and over. This needs to be resolved.

Thank you,
Mary Angela Branch
1025 Tarpon Ave.
Port Isabel, TX 78578

mailing:
2005 Rodeo Drive
Austin, TX 78727

512-431-5884

SpaceX hasn't obtained environmental permits for 'flame deflector' system it's testing in Texas



SpaceX hasn't obtained environmental permits for 'flame deflector' syste...

Lora Kolodny

Elon Musk's SpaceX didn't apply for the environmental permits usually required to discharge industrial process w...

a

Angela Jones
512-431-5884
angela@angelajonesknows.com

Licensed by the Texas Real Estate Commission
License #609027

***** No e-mails sent or received shall constitute a legally binding contract unless and until a contract is written and signed by all parties.***

****** I will NEVER ask you to wire funds or send funds to anyone. If you are contacted to wire funds, contact your agent immediately.***

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Jon Niermann, *Chairman*
Bobby Janecka, *Commissioner*
Catarina R. Gonzales, *Commissioner*
Kelly Keel, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 7, 2024

Ms. Lauren Ice, Partner
Perales, Allmon & Ice, P.C.
1206 San Antonio Street
Austin, Texas 78701

Re: Comment Received, Proposed Agreed Enforcement Order – Space Exploration Technologies Corp.
RN111606745; Enforcement Case No. 66536; Docket No. 2024-1282-IWD-E

Dear Ms. Ice:

On October 1, 2024, we received your comment concerning the proposed agreed order for Space Exploration Technologies Corp. (the Respondent). I have forwarded your comment to our Harlingen Regional Office for their information and to our General Counsel's Office so that the Commissioners can consider your comments regarding the proposed order.

Texas Commission on Environmental Quality (TCEQ or Commission) staff and the Respondent agreed to the terms of the proposed order on August 13, 2024. Accordingly, if approved and issued by our Commission, the Respondent will be assessed an administrative penalty of \$3,750, of which \$750 has been deferred in accordance with our expedited order process and Penalty Policy.

The proposed agreed order includes one violation documented during a record review investigation conducted from July 25, 2024, through July 30, 2024. The Executive Director alleges that the Respondent failed to obtain authorization to discharge industrial wastewater into or adjacent to any water in the state. The proposed order recognizes that the Respondent submitted an administratively complete permit application for an industrial wastewater individual permit, which proposes to authorize discharges of wastewater associated to the facility's water deluge system. The proposed order further recognizes that a technical review of the application was completed, and it was determined that the proposed activities do not cause adverse risk to the environment.

No changes to the proposed agreed order were made in response to the comments. Our responses to the comments are provided below.

- Comment – TCEQ disregarded ongoing violations and complaints from the public for nearly one year, so the comment period should be extended following notice provided in Spanish.

Response: TCEQ had an ongoing investigation of the Respondent's activities in response to complaints received in the Harlingen Regional Office. During the period between late 2023 and when TCEQ's Harlingen Regional Office issued a Notice of Enforcement to the Respondent, investigative staff was working closely with the Respondent to obtain information and determine what permitting requirements were necessary. The Respondent submitted its application for an individual wastewater permit once notified by TCEQ that such a permit was required.

You request that notice of the proposed order be re-published for public comment, for an extended 60-day period, and in Spanish, citing to TCEQ rule 30 Tex. Admin. Code § 39.426 for analogous support. As you identify, however, the cited rule for public notice alternative language requirements applies to procedures governing permit applications; not enforcement orders. There is no TCEQ rule that requires a 60-day public comment period. To the contrary, TCEQ rule 30 Tex. Admin. Code § 70.10(c) states that public comment periods for proposed agreed orders are for 30 days. Notice of this proposed order was published in the Texas Register on August 30, 2024, and the comment period closed on October 1, 2024.

Additionally, there is no statutory requirement for the TCEQ to publish notice for a proposed enforcement agreed order in Spanish, and it is not agency practice to do so. However, if an individual requested a copy of the proposed agreed order in Spanish, TCEQ would take necessary steps to reasonably accommodate any such request. No such request has been received by TCEQ.

- **Comment -** The agreed order is not a Texas Pollutant Discharge Elimination System (TPDES) permit or substitute for a TPDES permit, and may not legally authorize discharges subject to the Clean Water Act.

Response: In accordance with Texas Water Code § 7.073, if a person violates any statute or rule within TCEQ's jurisdiction, the commission may: (1) assess against the person an administrative penalty under this subchapter; and (2) order the person to take corrective action. In this proposed order, TCEQ is requiring the Respondent to implement specific corrective actions that are necessary to resolve its violation, and which are appropriate against a backdrop of the Respondent's administratively complete application for an individual TPDES permit to authorize the discharges. The agreed order's specific corrective actions include ensuring that specific effluent limitations are met and conducting sampling when discharge occurs. TCEQ has determined that the effluent limitations and sampling requirements within the proposed agreed order are adequate given the unique, periodic, and intermittent nature of the Respondent's discharges. Additionally, during TCEQ's technical review of the administratively complete wastewater permit application, staff determined that the proposed activities presented no adverse risk to the environment.

- Comment - The proposed administrative penalty serves no public purpose because it does not act as a deterrent, economic benefit was not considered, and the 20% deferral is inappropriate.

Response: The penalty assessed in the order was calculated in accordance with statutory requirements from the Texas Water Code and TCEQ's Penalty Policy, which implements and standardizes penalty calculations that comply with those statutory requirements. As a threshold treatment, the violation at issue is best treated as a permitting failure, so it was assessed using the Programmatic Penalty Matrix, in accordance with TCEQ's Penalty Policy. The violation was also assessed through quarterly violation events because of the nature of the Respondent's discharges.

TCEQ data and documentation show that enhancements to the penalty were not warranted for this case. Data for the Respondent show that a Compliance History penalty enhancement is not warranted. TCEQ documentation does not indicate that culpability existed, which can sometimes warrant an enhancement. On the other hand, the Respondent did submit an administratively complete application to obtain permit authorization for the subject discharges, and it began monitoring any discharge from the deluge system prior to the date that TCEQ issued a Notice of Enforcement, so a Good Faith Efforts to Comply penalty reduction was applied to the assessed penalty, in accordance with TCEQ's Penalty Policy.

TCEQ staff did consider the Respondent's economic benefit from the subject violation, as required by the Texas Water Code and instructed by TCEQ's Penalty Policy; however, no adjustment was made. Specifically, the Respondent's Economic Benefit was calculated as \$1,589 per month for the identified time period. This amount is less than \$15,000, which is an amount over which an Economic Benefit penalty enhancement would be required. On this basis, no enhancement was applied here.

In accordance with TCEQ's Penalty Policy, the Respondent was eligible to receive a 20% deferral of the assessed administrative penalty. As outlined in TCEQ's Penalty Policy, this deferral is available to entities that qualify for resolving their enforcement action through a 1660 Administrative Order, and who choose to settle expeditiously so long as: the culpability enhancement was not applied; the order does not include any statutorily mandated minimum penalties; and the respondent does not have two or more prior administrative penalty orders as set out in Texas Water Code, Section 7.105(b)(2), (b)(4) and (b)(6).

By assessing a penalty in accordance with TCEQ's Penalty Policy, the amount was determined to be necessary to deter future violations.

Ms. Lauren Ice
Page 4
October 7, 2024

We appreciate your input into the enforcement action currently pending against the Respondent. The proposed agreed order will be considered at an upcoming Commissioner's Agenda. If you have further concerns or comments related to this order, please do not hesitate to call me at 512-239-2588. For environmental complaints related to the current operating conditions of the Respondent, you should contact our Harlingen Regional Office at 956-425-6010.

Thank you,

A handwritten signature in cursive script that reads "Amy Settemeyer".

Amy Settemeyer, Deputy Director
Enforcement Division
Texas Commission on Environmental Quality

cc: Manager, Water Section, Harlingen Regional Office, TCEQ



Penalty Calculation Worksheet (PCW)

Policy Revision 5 (January 28, 2021)

PCW Revision February 11, 2021

DATES	Assigned	5-Aug-2024	Screening	5-Aug-2024	EPA Due	
	PCW	5-Aug-2024				

RESPONDENT/FACILITY INFORMATION

Respondent	Space Exploration Technologies Corp.				
Reg. Ent. Ref. No.	RN111606745				
Facility/Site Region	15-Harlingen	Major/Minor Source	Minor		

CASE INFORMATION

Enf./Case ID No.	66536	No. of Violations	1
Docket No.	2024-1282-IWD-E	Order Type	1660
Media Program(s)	Water Quality	Government/Non-Profit	No
Multi-Media		Enf. Coordinator	Mistie Gonzales
		EC's Team	Enforcement Team 1
Admin. Penalty \$ Limit Minimum	\$0	Maximum	\$25,000

Penalty Calculation Section

TOTAL BASE PENALTY (Sum of violation base penalties)	Subtotal 1	\$5,000

ADJUSTMENTS (+/-) TO SUBTOTAL 1

Subtotals 2-7 are obtained by multiplying the Total Base Penalty (Subtotal 1) by the indicated percentage.

Compliance History	0.0%	Adjustment	Subtotals 2, 3, & 7	\$0

Notes No adjustment for Compliance History.

Culpability	No	0.0%	Enhancement	Subtotal 4	\$0

Notes The Respondent does not meet the culpability criteria.

Good Faith Effort to Comply Total Adjustments	Subtotal 5	-\$1,250

Economic Benefit	0.0%	Enhancement*	Subtotal 6	\$0

Total EB Amounts \$1,589
Estimated Cost of Compliance \$25,000
*Capped at the Total EB \$ Amount

SUM OF SUBTOTALS 1-7	Final Subtotal	\$3,750

OTHER FACTORS AS JUSTICE MAY REQUIRE	0.0%	Adjustment	\$0

Reduces or enhances the Final Subtotal by the indicated percentage.

Notes

Final Penalty Amount	\$3,750

STATUTORY LIMIT ADJUSTMENT	Final Assessed Penalty	\$3,750

DEFERRAL	20.0%	Reduction	Adjustment	-\$750

Reduces the Final Assessed Penalty by the indicated percentage.

Notes

Deferral offered for expedited settlement.

PAYABLE PENALTY	\$3,000

Screening Date	5-Aug-2024	Docket No.	2024-1282-IWD-E	PCW
Respondent	Space Exploration Technologies Corp.			<i>Policy Revision 5 (January 28, 2021)</i>
Case ID No.	66536			<i>PCW Revision February 11, 2021</i>
Reg. Ent. Reference No.	RN111606745			
Media	Water Quality			
Enf. Coordinator	Mistie Gonzales			

Compliance History Worksheet

>> Compliance History Site Enhancement (Subtotal 2)

Component	Number of...	Number	Adjust.
NOVs	Written notices of violation ("NOVs") with same or similar violations as those in the current enforcement action (<i>number of NOVs meeting criteria</i>)	0	0%
	Other written NOVs	0	0%
Orders	Any agreed final enforcement orders containing a denial of liability (<i>number of orders meeting criteria</i>)	0	0%
	Any adjudicated final enforcement orders, agreed final enforcement orders without a denial of liability, or default orders of this state or the federal government, or any final prohibitory emergency orders issued by the commission	0	0%
Judgments and Consent Decrees	Any non-adjudicated final court judgments or consent decrees containing a denial of liability of this state or the federal government (<i>number of judgments or consent decrees meeting criteria</i>)	0	0%
	Any adjudicated final court judgments and default judgments, or non-adjudicated final court judgments or consent decrees without a denial of liability, of this state or the federal government	0	0%
Convictions	Any criminal convictions of this state or the federal government (<i>number of counts</i>)	0	0%
Emissions	Chronic excessive emissions events (<i>number of events</i>)	0	0%
Audits	Letters notifying the executive director of an intended audit conducted under the Texas Environmental, Health, and Safety Audit Privilege Act, 74th Legislature, 1995 (<i>number of audits for which notices were submitted</i>)	0	0%
	Disclosures of violations under the Texas Environmental, Health, and Safety Audit Privilege Act, 74th Legislature, 1995 (<i>number of audits for which violations were disclosed</i>)	0	0%
Other	Environmental management systems in place for one year or more	No	0%
	Voluntary on-site compliance assessments conducted by the executive director under a special assistance program	No	0%
	Participation in a voluntary pollution reduction program	No	0%
	Early compliance with, or offer of a product that meets future state or federal government environmental requirements	No	0%

Adjustment Percentage (Subtotal 2) 0%

>> Repeat Violator (Subtotal 3)

No	Adjustment Percentage (Subtotal 3)	0%

>> Compliance History Person Classification (Subtotal 7)

Satisfactory Performer	Adjustment Percentage (Subtotal 7)	0%

>> Compliance History Summary

Compliance History Notes	No adjustment for Compliance History.

Total Compliance History Adjustment Percentage (Subtotals 2, 3, & 7) 0%

>> Final Compliance History Adjustment

Final Adjustment Percentage *capped at 100% 0%

Screening Date	5-Aug-2024	Docket No.	2024-1282-IWD-E	PCW	
Respondent	Space Exploration Technologies Corp.			Policy Revision 5 (January 28, 2021)	
Case ID No.	66536			PCW Revision February 11, 2021	
Reg. Ent. Reference No.	RN111606745				
Media	Water Quality				
Enf. Coordinator	Mistie Gonzales				
Violation Number	1				
Rule Cite(s)	30 Tex. Admin. Code § 305.42(a)				
Violation Description	Failed to obtain authorization to discharge industrial wastewater into or adjacent to any water in the state. Specifically, the Respondent has been operating the Facility and discharging industrial wastewater without proper authorization. Industrial wastewater was discharged without a Texas Pollutant Discharge Elimination System (TPDES) permit on March 14, 2024, April 5, 2024, May 8, 2024, and July 26, 2024.				
		Base Penalty	\$25,000		
>> Environmental, Property and Human Health Matrix					
OR		Harm	Major	Moderate	Minor
	Release				
	Actual				
	Potential				
		Percent	0.0%		
>> Programmatic Matrix					
	Falsification	Major	Moderate	Minor	
		X			
	Percent	10.0%			
Matrix Notes	100% of the rule requirements were not met.				
		Adjustment	\$22,500		
			\$2,500		
Violation Events					
	Number of Violation Events	2	11	Number of violation days	
	daily				
	weekly				
	monthly				
	quarterly	x			
	semiannual				
	annual				
	single event				
	Violation Base Penalty	\$5,000			
	Two quarterly events are recommended from the discharge start date (March 14, 2024) to the screening date (August 5, 2024).				
Good Faith Efforts to Comply		25.0%	Reduction \$1,250		
	Extraordinary		Before NOE/NOV	NOE/NOV to EDPRP/Settlement Offer	
	Ordinary	x			
	N/A				
	Notes	TCEQ recognizes that the Respondent submitted an administratively complete application prior to the NOE and has been monitoring any discharge of deluge water.			
		Violation Subtotal	\$3,750		
Economic Benefit (EB) for this violation					
	Estimated EB Amount	\$1,589	Statutory Limit Test		
			Violation Final Penalty Total	\$3,750	
		This violation Final Assessed Penalty (adjusted for limits)	\$3,750		

Economic Benefit Worksheet

Respondent Space Exploration Technologies Corp.
Case ID No. 66536
Reg. Ent. Reference No. RN111606745
Media Water Quality
Violation No. 1

Percent Interest	Years of Depreciation
5.0	15

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Costs Saved	EB Amount
Delayed Costs							
Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/Construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs	\$25,000	24-Mar-2024	1-Jul-2025	1.27	\$1,589	n/a	\$1,589
Other (as needed)				0.00	\$0	n/a	\$0
Notes for DELAYED costs	Permit delayed cost is the estimated amount to prepare and submit a permit application and obtain authorization to discharge industrial wastewater. The Date Required is the unauthorized discharge start date and the Final Date is the estimated date of compliance.						
Avoided Costs							
ANNUALIZE avoided costs before entering item (except for one-time avoided costs)							
Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/Equipment				0.00	\$0	\$0	\$0
Financial Assurance				0.00	\$0	\$0	\$0
ONE-TIME avoided costs				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Notes for AVOIDED costs							
Approx. Cost of Compliance	\$25,000				TOTAL	\$1,589	



Compliance History Report

Compliance History Report for CN602867657, RN111606745, Rating Year 2023 which includes Compliance History (CH) components from September 1, 2018, through August 31, 2023.

Customer, Respondent, or Owner/Operator:	CN602867657, Space Exploration Technologies Corp.	Classification:	SATISFACTORY	Rating:	0.40
Regulated Entity:	RN111606745, STARBASE LAUNCH PAD SITE	Classification:	UNCLASSIFIED	Rating:	-----
Complexity Points:	3	Repeat Violator:	NO		
CH Group:	14 - Other				
Location:	Located on the south side of the eastern terminus of State Highway 4, Cameron County, Texas				
TCEQ Region:	REGION 15 - HARLINGEN				
ID Number(s):					
STORMWATER PERMIT	TXR05GD61	STORMWATER PERMIT	TXR1515PQ		
WASTEWATER PERMIT	WQ0005462000	WASTEWATER EPA ID	TX0146251		
EMERGENCY RESPONSE ID NUMBER	R15111606745	INDUSTRIAL AND HAZARDOUS WASTE SOLID WASTE REGISTRATION # (SWR)	98370		
INDUSTRIAL AND HAZARDOUS WASTE EPA ID	TXR000086156				
Compliance History Period:	September 01, 2018 to August 31, 2023	Rating Year:	2023	Rating Date:	09/01/2023
Date Compliance History Report Prepared:	August 05, 2024				
Agency Decision Requiring Compliance History:	Enforcement				
Component Period Selected:	August 05, 2019 to August 05, 2024				
TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.					
Name:	Mistie Gonzales		Phone:	(254) 761-3056	

Site and Owner/Operator History:

1) Has the site been in existence and/or operation for the full five-year compliance period?	NO
2) Has there been a (known) change in ownership/operator of the site during the compliance period?	NO

Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:

N/A

B. Criminal convictions:

N/A

C. Chronic excessive emissions events:

N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):

Item 1	February 01, 2024	(1904680)

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):

A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

N/A

F. Environmental audits:

N/A

G. Type of environmental management systems (EMSs):

N/A

H. Voluntary on-site compliance assessment dates:

N/A

I. Participation in a voluntary pollution reduction program:

N/A

J. Early compliance:

N/A

Sites Outside of Texas:

N/A

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



IN THE MATTER OF AN
ENFORCEMENT ACTION
CONCERNING
SPACE EXPLORATION
TECHNOLOGIES CORP.
RN111606745

§ BEFORE THE
§
§ TEXAS COMMISSION ON
§
§ ENVIRONMENTAL QUALITY

AGREED ORDER DOCKET NO. 2024-1282-IWD-E

I. JURISDICTION AND STIPULATIONS

On _____, the Texas Commission on Environmental Quality ("the Commission" or "TCEQ") considered this agreement of the parties, resolving an enforcement action regarding Space Exploration Technologies Corp. (the "Respondent") under the authority of TEX. WATER CODE chs. 7 and 26. The Executive Director of the TCEQ, through the Enforcement Division, and the Respondent together stipulate that:

1. The Respondent owns and operates the Starbase Launch Pad Site located on the south side of the eastern terminus of State Highway 4 in Cameron County, Texas (the "Facility"). The Facility adjoins, is contiguous with, surrounds, or is near or adjacent to water in the state as defined in TEX. WATER CODE § 26.001.
2. The Executive Director and the Respondent agree that the TCEQ has jurisdiction to enter this Order pursuant to TEX. WATER CODE §§ 7.002, 7.051, and 7.073, and that the Respondent is subject to TCEQ's jurisdiction. The TCEQ has jurisdiction in this matter pursuant to TEX. WATER CODE § 5.013 because it alleges violations of TEX. WATER CODE ch. 26 and the rules of the TCEQ.
3. The occurrence of any violation is in dispute and the entry of this Order shall not constitute an admission by the Respondent of any violation alleged in Section II ("Allegations"), nor of any statute or rule.
4. An administrative penalty in the amount of \$3,750 is assessed by the Commission in settlement of the violations alleged in Section II ("Allegations"). The Respondent paid \$3,000 of the penalty and \$750 is deferred contingent upon the Respondent's timely and satisfactory compliance with all the terms of this Order. The deferred amount shall be waived only upon full compliance with all the terms and conditions contained in this Order. If the Respondent fails to timely and satisfactorily comply with any of the terms or requirements contained in this Order, the Executive Director may demand payment of all or part of the deferred penalty amount.
5. The Executive Director and the Respondent agree on a settlement of the matters alleged in this enforcement action, subject to final approval in accordance with 30 TEX. ADMIN. CODE § 70.10(a). Any notice and procedures, which might otherwise be authorized or required in this action, are waived in the interest of a more timely resolution of the matter.

6. The Executive Director may, without further notice or hearing, refer this matter to the Office of the Attorney General of the State of Texas ("OAG") for further enforcement proceedings if the Executive Director determines that the Respondent has not complied with one or more of the terms or conditions in this Order.
7. This Order represents the complete and fully integrated agreement of the parties. The provisions of this Order are deemed severable and, if a court of competent jurisdiction or other appropriate authority deems any provision of this Order unenforceable, the remaining provisions shall be valid and enforceable.
8. This Order shall terminate five years from its effective date or upon compliance with all the terms and conditions set forth in this Order, whichever is later.
9. The Executive Director recognizes that by July 1, 2024, the Respondent implemented the following corrective measures at the Site: submitted an administratively complete permit application for an industrial wastewater individual permit, proposing to authorize discharges of wastewater associated to the Facility's water deluge system. Subsequently, TCEQ conducted a technical review of the application and determined that the proposed activities do not cause adverse risk to the environment.

II. ALLEGATIONS

During a record review for the Facility conducted from July 25, 2024 through July 30, 2024, an investigator documented that the Respondent failed to obtain authorization to discharge industrial wastewater into or adjacent to any water in the state, in alleged violation of 30 TEX. ADMIN. CODE § 305.42(a). Specifically, the Respondent has been operating the Facility and discharging industrial wastewater without proper authorization. Industrial wastewater was discharged without a Texas Pollutant Discharge Elimination System (TPDES) permit on March 14, 2024, April 5, 2024, May 8, 2024, and July 26, 2024.

III. DENIALS

The Respondent generally denies each allegation in Section II ("Allegations").

IV. ORDERING PROVISIONS

NOW, THEREFORE, THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY ORDERS that:

1. The Respondent is assessed a penalty as set forth in Section I, Paragraph No. 4. The payment of this penalty and the Respondent's compliance with all of the requirements set forth in this Order resolve only the allegations in Section II. The Commission shall not be constrained in any manner from requiring corrective action or penalties for violations which are not raised here. Penalty payments shall be made payable to "TCEQ" and shall be sent with the notation "Re: Space Exploration Technologies Corp., Docket No. 2024-1282-IWD-E" to:

Financial Administration Division, Revenue Operations Section
Attention: Cashier's Office, MC 214
Texas Commission on Environmental Quality
P.O. Box 13088
Austin, Texas 78711-3088

2. The Respondent shall undertake the following technical requirements:

- a. Immediately upon the effective date of this Order, until such a time that authorization to discharge is obtained or until 300 days after the effective date of this Order, whichever is earlier, the Respondent may continue to operate the Facility under the following conditions:

- i. Any discharge of deluge water must meet the effluent limitations in the table below.

Volume: Intermittent and flow-variable.

Effluent Characteristics	Discharge Limitations
	Daily Maximum mg/L
Chemical Oxygen Demand	200
Oil & Grease	15

- ii. Additional sampling should be conducted and/or data should be collected for the following parameters: Flow; Temperature; Total Copper; Total Mercury; Total Thallium; and Total Zinc.
- iii. Sampling should occur within one (1) hour, or at the earliest practicable time, following the conclusion of the launch event and be in accordance with 30 TEX. ADMIN. CODE §§ 319.11 and 319.12.
- iv. Ensure that the pH of the discharge is not less than 6.0 standard units nor greater than 9.0 standard units. Monitoring must be no less than once per day when discharge occurs.
- v. Effluent monitoring samples must be taken at the following locations.
- (1) Outfall 001 as defined in the application referenced in Section I, Paragraph No. 9.
- (2) Any other area where a discharge occurs that does not flow through Outfall 001.
- b. All sampling results should be maintained at the Facility and made available upon request by TCEQ staff.
- c. Respond completely and adequately, as determined by the TCEQ, to all requests for information concerning the permit application within 30 days after the date of such requests or by any other deadline specified in writing.

- d. Within 315 days after the effective date of this Order, submit written certification that authorization to discharge has been obtained, and include detailed supporting documentation including photographs, receipts, and/or other records to demonstrate compliance. The certification shall be signed by the Respondent and shall include the following certification language:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

The certification shall be submitted to:

Enforcement Division, MC 149A
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

with a copy to:

Water Section Manager
Harlingen Regional Office
Texas Commission on Environmental Quality
1804 W. Jefferson Avenue
Harlingen, Texas 78550-5247

3. All relief not expressly granted in this Order is denied.
4. The duties and provisions imposed by this Order shall apply to and be binding upon the Respondent. The Respondent is ordered to give notice of this Order to personnel who maintain day-to-day control over the Facility operations referenced in this Order.
5. The Executive Director may grant an extension of any deadline in this Order or in any plan, report, or other document submitted pursuant to this Order, upon a written and substantiated showing of good cause. All requests for extensions by the Respondent shall be made in writing to the Executive Director. Extensions are not effective until the Respondent receives written approval from the Executive Director. The determination of what constitutes good cause rests solely with the Executive Director. Extension requests shall be sent to the Enforcement Division at the address listed above.
6. This Order, issued by the Commission, shall not be admissible against the Respondent in a civil proceeding, unless the proceeding is brought by the OAG to: (1) enforce the terms of this Order; or (2) pursue violations of a statute within the Commission's jurisdiction, or of a rule adopted or an order or permit issued by the Commission under such a statute.
7. This Order may be executed in separate and multiple counterparts, which together shall constitute a single instrument. Any page of this Order may be copied, scanned,

digitized, converted to electronic portable document format ("pdf"), or otherwise reproduced and may be transmitted by digital or electronic transmission, including but not limited to facsimile transmission and electronic mail. Any signature affixed to this Order shall constitute an original signature for all purposes and may be used, filed, substituted, or issued for any purpose for which an original signature could be used. The term "signature" shall include manual signatures and true and accurate reproductions of manual signatures created, executed, endorsed, adopted, or authorized by the person or persons to whom the signatures are attributable. Signatures may be copied or reproduced digitally, electronically, by photocopying, engraving, imprinting, lithographing, electronic mail, facsimile transmission, stamping, or any other means or process which the Executive Director deems acceptable. In this paragraph exclusively, the terms: electronic transmission, owner, person, writing, and written, shall have the meanings assigned to them under TEX. BUS. ORG. CODE § 1.002.

8. The effective date of this Order is the date it is signed by the Commission. A copy of this fully executed Order shall be provided to each of the parties.

SIGNATURE PAGE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

For the Commission

Date



10/7/2024

For the Executive Director

Date

I, the undersigned, have read and understand the attached Order. I am authorized to agree to the attached Order, and I do agree to the terms and conditions specified therein. I further acknowledge that the TCEQ, in accepting payment for the penalty amount, is materially relying on such representation.

I also understand that failure to comply with the Ordering Provisions, if any, in this Order and/or failure to timely pay the penalty amount, may result in:

- A negative impact on compliance history;
- Greater scrutiny of any permit applications submitted;
- Referral of this case to the OAG for contempt, injunctive relief, additional penalties, and/or attorney fees, or to a collection agency;
- Increased penalties in any future enforcement actions;
- Automatic referral to the OAG of any future enforcement actions; and
- TCEQ seeking other relief as authorized by law.

In addition, any falsification of any compliance documents may result in criminal prosecution.



Signature

8-13-2024

Date

SHEILA MCCORKLE

Name (Printed or typed)

Authorized Representative of

Space Exploration Technologies Corp.

VP, STARSHIP LEGAL & REGULATORY

Title

☐ If mailing address has changed, please check this box and provide the new address below:

Instructions: Send the original, signed Order with penalty payment to the Financial Administration Division, Revenue Operations Section at the address in Ordering Provision 1 of this Order.