Texas Commission on Environmental Quality

Waste Permits Division Correspondence Cover Sheet

Date: 9/9/2024
Facility Name: Greenbelt Landfill
Permit or Registration No.: 1586B

Nature of Correspondence:
☐ Initial/New
☒ Response/Revision to TCEQ Tracking No.: 29833044 (from subject line of TCEQ letter regarding initial submission)

Affix this cover sheet to the front of your submission to the Waste Permits Division. Check appropriate box for type of correspondence. Contact WPD at (512) 239-2335 if you have questions regarding this form.

Table 1 - Municipal Solid Waste Correspondence

Applications	Reports and Notifications
☐ New Notice of Intent	☐ Alternative Daily Cover Report
☐ Notice of Intent Revision	☐ Closure Report
☐ New Permit (including Subchapter T)	☐ Compost Report
☐ New Registration (including Subchapter T)	☐ Groundwater Alternate Source Demonstration
☐ Major Amendment	☐ Groundwater Corrective Action
☐ Minor Amendment	☐ Groundwater Monitoring Report
☐ Limited Scope Major Amendment	☐ Groundwater Background Evaluation
☒ Notice Modification	☐ Landfill Gas Corrective Action
☐ Non-Notice Modification	☐ Landfill Gas Monitoring
☐ Transfer/Name Change Modification	☐ Liner Evaluation Report
☐ Temporary Authorization	☐ Soil Boring Plan
☐ Voluntary Revocation	☐ Special Waste Request
☐ Subchapter T Disturbance Non-Enclosed Structure	☐ Other:
☐ Other:	

Table 2 - Industrial & Hazardous Waste Correspondence

Applications	Reports and Responses
☐ New	☐ Annual/Biennial Site Activity Report
☐ Renewal	☐ CPT Plan/Result
☐ Post-Closure Order	☐ Closure Certification/Report
☐ Major Amendment	☐ Construction Certification/Report
☐ Minor Amendment	☐ CPT Plan/Result
☐ CCR Registration	☐ Extension Request
☐ CCR Registration Major Amendment	☐ Groundwater Monitoring Report
☐ CCR Registration Minor Amendment	☐ Interim Status Change
☐ Class 3 Modification	☐ Interim Status Closure Plan
☐ Class 2 Modification	☐ Soil Core Monitoring Report
☐ Class 1 ED Modification	☐ Treatability Study
☐ Class 1 Modification	☐ Trial Burn Plan/Result
☐ Endorsement	☐ Unsaturated Zone Monitoring Report
☐ Temporary Authorization	☐ Waste Minimization Report
☐ Voluntary Revocation	☐ Other:
☐ 335.6 Notification	
☐ Other:	

Hydrex ENVIRONMENTAL

September 9, 2024

MC-124
Ms. Megan Henson, Manager
MSW Permits Section
Office of Waste, Waste Permits Division
P. O. Box 13087
Austin, TX 78711-3087

Re: Greenbelt Landfill – Harris County
Municipal Solid Waste – Permit No. 1586B
Response to Permit Modification NOD
Tracking No 29833044/Action ID: 29995164; RN101287852/CN602528804

Dear Ms. Henson:

The following information is provided, on behalf of Greenbelt Landfill and GFL Environmental in response to the above-referenced correspondence. In email correspondence dated August 20, 2024, TCEQ requested the customer name (CN), Waste Corporation of Texas, L.P., submitted in the July 30, 2024 permit modification application be replaced with GFL of Texas, L.P. Included herein is the updated permit modification application with the CN updated to reflect this request.

We trust you will find this information sufficiently thorough and acceptable. Should you have any questions, please feel free to contact me at (936) 568-9451 or via email at jdimezzo@hydrex-inc.com.

Sincerely,
Hydrex Environmental
TBPG Firm No. 50027

Jordan L. DiMezzo, G.I.T.
Geologist

312 OLD TYLER ROAD
NACOGDOCHES, TX 75961
936-568-9451
FAX: 936-568-9527

Attachments:
Attachment 1 – TCEQ 20650
Attachment 2 – ~~Strikeout~~/Underline Pages Showing Changes
Attachment 3 – Replacement New Pages
Attachment 4 – Fee Payment Receipt
Attachment 5 – Land Ownership Map
Attachment 6 – Land Ownership List

Distribution:

(Original + 1)	MC-124 Ms. Megan Henson Manager MSW Permits Section Office of Waste, Waste Permits Division Texas Commission on Environmental Quality P. O. Box 13087 Austin, TX 78711-3087
(1)	Waste Section Manager TCEQ Regional Office 12 5425 Polk Street, Ste. 12 Houston, Texas 77023-1452
(1)	Mr. Chandra Yadav, P.E. Municipal Solid Waste Permits Texas Commission on Environmental Quality E-Copy
(1)	Mr. Steve Howard Regional Environmental Compliance Manager GFL Environmental E-copy
(1)	Ms. Jennifer Glowacki Region Field Engineer GFL Environmental E-copy
(1)	Greenbelt Landfill 550 Old Genoa Red Bluff Rd Houston, TX 77034
(E-copy)	Hydrex Environmental

ATTACHMENT 1 - TCEQ 20650

Texas Commission on Environmental Quality

Application Form for Municipal Solid Waste Permit or Registration Modification or Temporary Authorization

Application Tracking Information

Facility Name: Greenbelt Landfill

Permittee or Registrant Name: GFL of Texas LP

MSW Authorization Number: 1586B

Initial Submission Date: 5/28/2024

Revision Date: 9/9/2024

Instructions for completing this form are provided in form TCEQ-20650-instr[1]. If you have questions, contact the Municipal Solid Waste Permits Section by email to [redacted] or by phone at 512-239-2335.

Application Data

1. Submission Type

☐ Initial Submission ☒ Notice of Deficiency (NOD) Response

2. Authorization Type

☒ Permit ☐ Registration

3. Application Type

☒ Modification with Public Notice ☐ Modification without Public Notice

☐ Temporary Authorization (TA) ☐ Modification for Name Change or Transfer

4. Application Fee

Amount

The application fee for a modification or temporary authorization is $150.

Payment Method

☐ Check

☒ Online through ePay portal www3.tceq.texas.gov/epay/

If paid online, enter ePay Trace Number: [redacted]

[1] www.tceq.texas.gov/downloads/permitting/waste-permits/msw/forms/20650-instr.pdf

5. Electronic Versions of Application

For modifications that require notice (other than those for arid exempt landfills), TCEQ will publish electronic versions of the application online. Applicants must provide a clean copy of the administratively complete application and technically complete application. TCEQ will also publish electronic versions of NOD responses online.

6. Party Responsible for Mailing Notice

For modifications that require notice, indicate who will be responsible for mailing notice:

☐ Applicant ☐ Agent in Service ☒ Consultant

Contact Name: Jordan DiMezzo

Title: Geologist

Email Address: [redacted]

7. Confidential Documents

Does the application contain confidential documents?

☐ Yes ☒ No

If "Yes", reference the confidential documents in the application, but submit the confidential documents as an attachment in a separate binder marked "CONFIDENTIAL."

8. Facility General Information

Facility Name: Greenbelt Landfill

Contact Name: Steven Howard Title: Regional Environmental Complianc

MSW Authorization Number (if existing): 1586B

Regulated Entity Reference Number: **RN** 101287852

Physical or Street Address: 550 Genoa-Red Bluff Road

City: Houston County: Harris State: TX Zip Code: 77034

Phone Number:

Latitude (Degrees, Minutes, Seconds): 29°37'35.2"

Longitude (Degrees, Minutes, Seconds): -95°11'18.1"

9. Facility Types

☐ Type I ☒ Type IV ☐ Type V

☐ Type IAE ☐ Type IVAE ☐ Type VI

10. Description of the Revisions to the Facility

Provide a brief description of revisions to permit or registration conditions and supporting documents referred to by the permit or registration, and a reference to the specific provisions under which the modification or temporary authorization application is being made. Also, provide an explanation of why the modification or temporary authorization is needed:

Notice permt modification for the inclusion of the Remediation Plan for GP-10A into the facility's permit.

11. Facility Contact Information

Site Operator (Permittee or Registrant)

Name: GFL of Texas LP

Customer Reference Number: **CN** 602528804

Contact Name: Steven Howard Title: Regional Environmental Complianc

Mailing Address: 18511 Beaumont Hwy

City: Houston County: Harris State: Tx Zip Code: 77049

Phone Number: _____

Email Address: [redacted]

Texas Secretary of State (SOS) Filing Number: 0800108480

Operator (if different from *Site Operator*)

Name: _____

Customer Reference Number: **CN** _____

Contact Name: _____ Title: _____

Mailing Address: _____

City: _____ County: _____ State: _____ Zip Code: _____

Phone Number: _____

Email Address: _____

Texas Secretary of State (SOS) Filing Number: _____

Consultant (if applicable)

Firm Name: Hydrex Environmental

Consultant Name: John Q. Hargrove

Texas Board of Professional Engineers Firm Registration Number: F-13588

Contact Name: John Q. Hargrove Title: Senior Engineer

Mailing Address: 312 Old Tyler Road

City: Nacogdoches County: Nacogdoches State: TX Zip Code: 75961

Phone Number: 936-568-9451

Email Address: [redacted]

Agent in Service (required for out-of-state applicants)

Name: _____

Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

12. Ownership Status of the Facility

Is this a modification that changes the legal description, the property owner, or the Site Operator (Permittee or Registrant)?

☐ Yes ☒ No

If the answer is "No", skip this section.

Does the Site Operator (Permittee or Registrant) own all the facility units and all the facility property?

☐ Yes ☐ No

If "No", provide the following information for other owners.

Owner Name: _____

Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

Signature Page

Site Operator or Authorized Signatory

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.

Name: Steven Howard Title: Reg Enviro Compliance Manager

Email Address: [redacted]

Signature: _____ Date: 9/5/2024

Operator or Principal Executive Officer Designation of Authorized Signatory

To be completed by the operator if the application is signed by an authorized representative for the operator.

I hereby designate _____ as my representative and hereby authorize said representative to sign any application, submit additional information as may be requested by the Commission; and/or appear for me at any hearing or before the Texas Commission on Environmental Quality in conjunction with this request for a Texas Water Code or Texas Solid Waste Disposal Act permit. I further understand that I am responsible for the contents of this application, for oral statements given by my authorized representative in support of the application, and for compliance with the terms and conditions of any permit which might be issued based upon this application.

Operator or Principal Executive Officer Name: _____

Email Address: _____

Signature: _____ Date: _____

Notary

SUBSCRIBED AND SWORN to before me by the said Steven Howard

On this 5th day of September, 2024

My commission expires on the 12th day of April, 2026

_____

Notary Public in and for

Harris County County, Texas

BRANDON MARTIN
Notary Public, State of Texas
Comm. Expires 04-12-2026
Notary ID 133662428

Note: Application Must Bear Signature and Seal of Notary Public

Attachments for Permit or Registration Modification with Public Notice

Refer to instruction document **200650-instr** for professional engineer seal requirements.

Attachments Table 1. Required attachments.

Required Attachments	Attachment Number
Land Ownership Map	6
Landowners List	5
Marked (Redline/Strikeout) Pages	2
Unmarked Revised Pages	3

Attachments Table 2. Additional attachments as applicable.

Additional Attachments as Applicable (select all that apply and add others as needed)	Attachment Number
☐ TCEQ Core Data Form(s)	1
☐ Signatory Authority Delegation	
■ Fee Payment Receipt	4
☐ Confidential Documents	

Attachments for Permit or Registration Modification without Public Notice, or Temporary Authorization

Refer to instruction document **200650-instr** for professional engineer seal requirements.

Attachments Table 3. Required attachments for modifications.

Required Attachments for Modification	Attachment Number
Marked (Redline/Strikeout) Pages	
Unmarked Revised Pages	

Attachments Table 4. Additional attachments for modifications and temporary authorizations, as applicable.

Additional Attachments as Applicable (select all that apply and add others as needed)	Attachment Number
☐ TCEQ Core Data Form(s)	
☐ Signatory Authority Delegation	
☐ Fee Payment Receipt	
☐ Confidential Documents	

Attachments for Permit or Registration Name Change or Transfer Modification

Refer to instruction document **200650-instr** for professional engineer seal requirements.

Attachments Table 5. Required attachments.

Required Attachments	Attachment Number
TCEQ Core Data Form(s)	
Property Legal Description	
Property Metes and Bounds Description	
Metes and Bounds Drawings	
On-Site Easements Drawing	
Land Ownership Map	
Land Ownership List	
Property Owner Affidavit	
Verification of Legal Status	
Evidence of Competency	

Attachments Table 6. Additional attachments as applicable.

Additional Attachments as Applicable (select all that apply and add others as needed)	Attachment Number
☐ Signatory Authority Delegation	
☐ Fee Payment Receipt	
☐ Confidential Documents	
☐ Final Plat Record of Property	
☐ Assumed Name Certificate	

ATTACHMENT 2 – Strikeout/Underline Pages Showing Changes

FOR PERMIT PURPOSES ONLY

PART III - ATTACHMENT 6

LANDFILL GAS MANAGEMENT PLAN

MUNICIPAL SOLID WASTE PERMIT AMENDMENT APPLICATION

FOR:

GREENBELT LANDFILL
HARRIS COUNTY, TEXAS
TCEQ PERMIT NO. MSW-1586B

Prepared for:

~~Waste Corporation of Texas, L.P.~~
~~1330 Post Oak Blvd, "Jlh Floor~~
~~Houston, Texas 77056~~

GFL of Texas L.P.
2050 W. Sam Houston Parkway S.
Houston, Texas 77042

Prepared by:

SCS ENGINEERS
Texas Board of Professional Engineers Registration No. F-3407
12651 Briar Forest Dr., Suite 205
Houston, TX 77077
(281) 293-8494

October 2021
Revision 1 – March 2022
Revision 2 – July 2022
Revision 3 – September 2022
Revision 4 – February 2023
Revision 5 – September 2024

STATE OF TEXAS
9/9/24
JOHN Q. HARGROVE
65272
LICENSED
PROFESSIONAL ENGINEER

September 2024 Revisions Only
Hydrex Environmental
TBPELS Eng. Firm No. F-13588

STATE OF TEXAS
JAMES ROY MURRAY III
73860
LICENSED
PROFESSIONAL ENGINEER
2/15/23

TABLES

FIGURES

APPENDICIES

September 2024 Revisions Only
Hydrex Environmental
TBPELS Eng. Firm No. F-13588

7.0 PREVIOUSLY IMPLEMENTED REMEDATION PLANS

7.1 Landfill Gas Assessment and Remediation Plan for GP-10A

During the regularly scheduled 2023 first quarterly methane monitoring event, methane was detected at 58.3 percent by volume in gas monitoring probe GP-10A. Gas samples were collected from GP-10A and analyzed using EPA method TO-14. The high VOC concentrations noted in the analytical testing indicated that the landfill was a potential source of the methane in GP-10A.

As a result, four (4) temporary gas probes were installed at the western and eastern extent of the gas plume allowing for weekly monitoring during assessment and remediation activities. Evaluation of the investigation data collected during the assessment indicated the elevated concentrations in GP-10A were likely sourced from migrating landfill gas from the adjacent landfill.

To effectively cut off landfill gas migration four PVs were installed and monitored weekly. Based on weekly monitoring of the PVs, it was determined that additional remedial efforts were necessary. The existing PVs were converted to soil vapor extraction (SVE) points. The conversion of the PVs to SVEs was considered complete on February 29, 2024.

The installation of the temporary active gas extraction system is detailed in Appendix III-6B of this permit.

APPENDIX III-6B
LANDFILL GAS ASSESSMENT REPORT AND REMEDATION PLAN FOR GP-10A

ATTACHMENT 3 – Unmarked/Replacement Pages

FOR PERMIT PURPOSES ONLY

PART III - ATTACHMENT 6

LANDFILL GAS MANAGEMENT PLAN

MUNICIPAL SOLID WASTE PERMIT AMENDMENT APPLICATION

FOR:

GREENBELT LANDFILL
HARRIS COUNTY, TEXAS
TCEQ PERMIT NO. MSW-1586B

Prepared for:

GFL of Texas L.P.
2050 W. Sam Houston Parkway S.
Houston, Texas 77042

Prepared by:

SCS ENGINEERS
Texas Board of Professional Engineers Registration No. F-3407
12651 Briar Forest Dr., Suite 205
Houston, TX 77077
(281) 293-8494

October 2021
Revision 1 – March 2022
Revision 2 – July 2022
Revision 3 – September 2022
Revision 4 – February 2023
Revision 5 - September 2024

September 2024 Revisions Only
Hydrex Environmental
TBPELS Eng. Firm No. F-13588

TABLES

FIGURES

APPENDICIES

September 2024 Revisions Only
Hydrex Environmental
TBPELS Eng. Firm No. F-13588

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APPENDIX III-6B
LANDFILL GAS ASSESSMENT REPORT AND REMEDATION PLAN FOR GP-10A

Hydrex ENVIRONMENTAL

April 29, 2024

MC 124
Ms. Megan Henson, Manager
MSW Permits Section
Waste Permits Division
Texas Commission on Environmental Quality (TCEQ)
P. O. Box 13087
Austin, TX 78711-3087

Re: Landfill Gas Assessment Report and Remediation Plan
Greenbelt Landfill
Permit No. MSW 1586B
Harris County, Texas
RN101287852; CN602528804

Dear Ms. Henson:

Submitted herein is the Landfill Gas Assessment Report and Remediation Plan prepared for the above-referenced site. If you have any questions or comments concerning this submittal or the information presented, please contact us at (936) 568-9451.

Sincerely,
Hydrex Environmental
TBPG Firm No. 50027
TBPELS Eng. Firm No. F-13588

Jordan L. DiMezzo, G.I.T.
Geologist

John Q. Hargrove, P.E.
Project Engineer

312 OLD TYLER ROAD
NACOGDOCHES, TX 75961

936-568-9451
FAX: 936-568-9527

Distribution:

Original + 1	MC 124 Ms. Megan Henson, Manager MSW Permits Section Permits Division TCEQ P. O. Box 13087 Austin, TX 78711-3087
(1)	Ms. Nichole Bealle Regional Director TCEQ Regional Office 12 5425 Polk Ave., Ste. H Houston, TX 77023-1452
(1)	Mr. Steven Howard Regional Environmental Compliance Manager GFL Environmental E-Copy
(1)	Ms. Jennifer Glowacki Region Field Engineer GFL Environmental E-Copy
(1)	Mr. Mark Meadows District Manager GFL Environmental E-Copy
(1)	Greenbelt Landfill 550 Old Genoa Red Bluff Rd Houston, TX 77034
1 copy	Hydrex Environmental

LANDFILL GAS ASSESSMENT REPORT
AND
REMEDIATION PLAN

GREENBELT LANDFILL
PERMIT NO. MSW 1586B
HARRIS COUNTY, TEXAS

April 29, 2024

Jordan L. DiMezzo, G.I.T.
Geologist

STATE OF TEXAS
JOHN Q. HARGROVE
65272
LICENSED PROFESSIONAL ENGINEER
4/29/24

John Q. Hargrove, P.E.
Project Engineer

Prepared by
Hydrex Environmental
312 Old Tyler Road
Nacogdoches, Texas 75961
TBPG Firm No. 50027
TBPELS Eng. Firm No. F-13588

Table of Contents

INTRODUCTION

This report summarizes activities conducted in response to a methane gas exceedance and in accordance with procedures outlined in Section 6.0 (Contingency Plan) of the approved Landfill Gas Management Plan (LFGMP) for Greenbelt Landfill, MSW Permit No. 1586B. This report includes relevant information on the initial exceedance, evaluation activities, investigation to date, and the proposed remedy for the exceedance. This report was prepared on behalf of GFL Environmental and Greenbelt Landfill.

METHANE EXCEEDANCE SUMMARY

During the quarterly landfill gas event, on February 21, 2023, methane levels more than the Lower Explosive Limit (LEL) were detected in GP-10A with a concentration of 58.3 volume percent methane. Methane was not detected in any other gas probe, facility building, or off-site building. In accordance with the Contingency Plan, as provided in the LFGMP, immediate actions to protect human health were implemented, including notification requirements, additional gas monitoring, and gas migration assessment.

Notifications were provided to TCEQ personnel, local and county officials, emergency response officials, and to the public in correspondence dated February 21, 2023. In addition, letters of notification were sent to neighboring property owners within 1,000 feet of the exceedance on February 22, 2023.

In correspondence dated February 28, 2023, TCEQ was again notified of the results of the February 21, 2023, quarterly monitoring event and provided with all required information including copies of the notification correspondence to required parties. A copy of the February 28, 2023, correspondence letter is included in Appendix D.

EXISTING SITE CONDTIONS

Landfill Gas Monitoring System

Twelve perimeter Gas Probes (GPs) and three Utility Vents (UVs) comprise the landfill gas monitoring system at Greenbelt Landfill. Gas probe GP-10A is located along the permit boundary on the south side of the landfill. A site map of the landfill showing

locations of the gas probes, utility vents, and buildings is included as Figure 1 (Appendix A).

Site Geology

The site is located within the Gulf Coast sedimentary basin and within the Pleistocene age Beaumont Formation. The Beaumont Formation consists of mostly clay, silt, and sand and includes mainly stream channel, point bar, natural levee, backswamp, and to a lesser extent coastal marsh and mud flat deposits. The geology at the site as characterized by Attachment 4 of the permit includes five units. Geologic information for these units is summarized below.

- Unit I – Surficial soil consisting primarily of lean clay with silt and sand,
- Unit II – Primarily fine sand with silty sand, silt, and occasional clay layers,
- Unit III – Highly plastic and lean clays with silt layers,
- Unit IV – Fine-grained sand, silty sand, and clayey sand with medium-to course-grained sand and gravel, and
- Unit V – Highly plastic clay

GAS MIGRATION ASSESSMENT

As required by Section 6.1 of the LFGMP, daily follow up readings were taken for one week following the initial exceedance at GP-10A, the two adjacent gas probes (GP-6 and GP-7), and structures within 1,000 feet of the methane exceedance location. The results of daily monitoring can be found in Table 1 (Appendix B). A map showing the location of the probes and structures that were monitored is provided as Figure 2 (Appendix A). Based on the continued methane exceedance in GP-10A, a gas migration assessment was performed during February and March 2023 in accordance with the applicable portions of 30 TAC §330.371 and the LFGMP. The following information is provided as a summary of field activities and assessment results.

GP-10A Gas Sampling and TO-14 Analysis

As required by the LFGMP Section 6.1, laboratory analysis of gas collected for GP-10A using EPA method TO-14 was conducted on February 27, 2023. The purpose

of this analysis was to establish the source of the elevated methane concentrations in GP-10A. Gas samples from GP-10A were collected by Hydrex personnel using a laboratory-provided sampling train, a 4-hour flow controller, and a 6-Liter Summa canister.

After ensuring there was no infiltration of ambient air, the valve on the Summa canister was opened to initiate the collection procedures. Collection of the sample took place over a four-hour period. Upon completion of sampling, the required vacuum remained in the Summa canister as required by the laboratory method. Following completion of field activities, the Summa canister containing the sample from GP-10A was sent to a qualified laboratory for analysis of gas and TO-14 volatile organic compounds (VOCs). A full laboratory report of the results for the analysis at GP-10A is included in Appendix E. The high VOC concentrations noted in the analytical testing indicated that the landfill was a potential source of the methane in GP-10A. However, the abnormally high methane concentrations reported for GP-10A indicated there may be an alternative/additional source. Further assessment to determine the source was initiated.

Temporary Probe Installation

As part of the investigation, delineation of the plume was initiated. Delineation consisted of advancement of six (6) soil gas survey borings spanning 100 feet west and 150 feet east of GP-10A. A map showing all borings is included as Figure 3 (Appendix A). All borings were advanced using direct push techniques employing hollow connecting rods and an expendable boring point. Each boring was advanced to twenty feet below ground surface (bgs) to coincide with the approximate average depth to water for the affected probe. Upon reaching terminal depth, the rod string was raised approximately 6 inches to allow for removal of the expendable point. Expulsion of the expendable point was ensured by inserting small diameter rods inside the hollow connecting rods and applying pressure to the expendable point. Following expulsion of the expendable point, a methane monitoring device (GEM 5000+) was attached to the connecting rods. The monitoring device was then used to evacuate ambient air within the connecting rods and surrounding soil gas while simultaneously measuring methane concentrations. The complete extent of each borehole was monitored for the presence of methane gas by

pulling up the connecting rods at approximate three-foot intervals and repeating the measurement process.

The final methane concentration measurement for each borehole was collected at approximately 2 feet bgs. This monitoring process was repeated for all survey points. Lateral expansion of the survey area continued until no methane was detected in the borehole, thereby defining the extent of gas migration. A summary table of the survey results is included as Table 3 (Appendix B) and a map showing the extent of gas migration is included as Figure 4 (Appendix A).

Assessment Results

The data collected during the assessment indicated detectable methane concentrations starting at approximately 17 feet bgs. This depth coincides with the coarser-grained materials noted in soil borings in the vicinity of GP-10A. These materials likely act as a conduit for migrating gas. The lateral extent of gas migration was determined based on non-detectable concentrations of methane in one or more boreholes.

The survey results indicated gas migration extends from approximately 150 feet east of GP-10A to approximately 50 feet west of GP-10A along the permit boundary. Four (4) temporary gas probes were installed at the western and eastern extent of the gas plume allowing for weekly monitoring during assessment and remediation activities. A map showing the temporary probe locations is included as Figure 4 (Appendix A). Following this installation, weekly monitoring was conducted at temporary probes TGP-25W, TGP-50W, TGP-125E, and TGP-150E. This monitoring was performed in conjunction with the continued weekly monitoring of gas probes GP-6, GP-7, and GP-10A, and structures within 1,000 feet of GP-10A. Results of this weekly monitoring are included in Table 1 and Table 2 (Appendix B). The results from the weekly monitoring at the temporary gas probes indicated the midline of the gas migration is approximately 47 feet east of GP-10A as shown in Figure 4 (Appendix A).

Evaluation of the investigation data collected during the assessment indicated the elevated concentrations in GP-10A are likely sourced from migrating landfill gas from the

adjacent landfill. To effectively cut off migration the following remedial measures were implemented.

REMEDIATION PLAN

A remediation plan has been developed based on the results of the landfill gas migration assessment, weekly monitoring results to date, and the Remediation Timeline submitted on February 14, 2024, (approved by TCEQ on March 4, 2024). The Remediation Plan was implemented in two steps:

1. Passive Vent (PV) Installation (May 15, 2023) and
2. Conversion of PVs to Soil Vapor Extraction Points (SVEs) (February 29, 2024).

Passive Vent Installation

Coarser-grained materials noted near GP-10A act as a conduit for migrating landfill gas. The depth of the gas migration and the coarse-grained nature of the geology near GP-10A indicated passive vents placed in native soils (outside the waste footprint) parallel to the permit boundary would be an effective initial step remedial step in addressing landfill gas migration near GP-10A. The estimated porosity of the subsurface materials was used to determine an approximate effective radius and spacing for each vent. Data from the temporary probes was used to estimate the number of PVs needed to effectively remediate the exceedance. Based on this information, four (4) PVs were installed at 50 ft spacing at a total depth of 20 ft bgs on May 17, 2024, as show in Figure 5 (Appendix A). The purpose of the passive vents was to intercept and passively vent landfill gas prior to migration outside of the permit boundary.

The PV installation consisted of four 8-inch passive vents outfitted with solar-powered turbine ventilators and other components as shown in the Passive Vent Construction Detail (Appendix C). The PVs were intentionally constructed as large bore extraction points allowing for potential future application of vacuum. Correspondence detailing the installation of the PVs was submitted in the Quarterly Metahne Monitoring Results (Q2 -2023) dated July 3, 2023, and in the Response to August 29, 2023, TCEQ Correspondence dated September 26, 2023.

To monitor the effectiveness of the passive vents, weekly monitoring was initiated for gas probes GP-6, GP-7, and GP-10A, temporary gas probes, and PVs (PV-1, -2, -3, and -4). Weekly monitoring showed an initial reduction of methane concentrations in GP-10A as shown in Table 1. However, in the following weeks, methane concentrations in GP-10A increased, indicating the passive system was being overwhelmed and modification of the system was needed. During a January 23, 2024, meeting, TCEQ agreed that enhancements to the current remediation system were necessary. Following the meeting, specific enhancements to the remediation system were recommended to TCEQ in correspondence dated January 25, 2024. The primary form of the enhancement to the passive system was the application of vacuum to the existing PVs to intercept the migrating landfill gas more effectively. TCEQ approved the recommendations in correspondence dated March 4, 2024.

Soil Vapor Extraction Points Conversion

To improve remediation effectiveness, the four existing PVs were converted to SVEs and connected to a temporary active extraction system flare. Conversion of the passive system to an active system included conversion of the PVs to SVEs and the installation of individually adjustable wellheads, piping, a mobile flare, and required system enhancements.

To facilitate the application of vacuum to each SVE, existing surface completions were modified to accept individually adjustable gas control wellheads. The wellheads installed were QED Precision Wellheads (Model Number ORP215M-R) which allow for quick orifice plate exchanges. These wellheads facilitate more accurate flow readings and precise adjustments, especially at low rates (under 10 scfm). The converted SVEs were then connected to an above-ground gas transfer network through flexible sunlight- resistant hose. The system gas transfer pipes run east to west and parallel the permit boundary as shown in Figure 7. System vacuum is provided through a temporary trailer-mounted flare skid.

Installation of the SVE system was completed on February 29, 2024. Maps detailing the location of the SVEs, lateral connections, and the temporary trailer-mounted flare skid

are provided in Appendix A as Figures 6 and 7. Additionally, SVE construction details are provided in Appendix C.

Monitoring Program

Following the conversion of the PVs to SVEs, methane concentrations have been monitored weekly in the SVEs, gas probes GP-6, GP-7, and GP-10A, temporary gas probes TGP-25W, TGP-50W, TGP-125E, and TGP-150E, and in the structures within 1,000 feet of GP-10A. As of the March 20, 2024, weekly event, GP-10A and all other gas probes and structures have not exceeded the regulatory limit of 5 percent by volume for one month. Results from the weekly monitoring are included in Tables 1 and 2. According to the approved Remediation Timeline, monitoring of GP-10A, -6, and -7, the temporary probes, structures, and SVEs has been reduced to a semi-monthly basis.

Monitoring will continue as necessary on a no less than semi-monthly basis until three consecutive months of regulatory compliance have been achieved. The remedy will be considered complete upon completion of three consecutive months of compliance in GP-10A. Evaluation of remedy progress will be submitted to TCEQ along with regular remediation effectiveness reports. The progress evaluation will include data collected during the preceding monitoring period and any necessary recommendations for continued monitoring or additional remedial activities. The following presents a generalized timeline of expected construction completion and subsequent required reporting.

Remediation Timeline:

- Day 0: Installation of enhancement and initial system adjustments (February 2024)
- Day 30: Completion of initial adjustments and report of findings to date (March 2024)
- Day 60: Submittal of finalized Remediation Plan and as-bult drawings (April 2024)
- Day 60: Submittal of first Bi-Monthly Monitoring Report (every other month) (April 2024)
- Day 90: Submittal of required Permit Modification (May 2024)
- Day 120: Submittal of second Bi-Monthly Monitoring Report (June 2024)
- Beyond 120 days: Continued Bi-Monthly reporting until completion.

After remedy completion, semi-monthly monitoring of the probes and passive vents will cease. Upon completion of the semi-monthly monitoring, the remediation for GP-10A will be considered complete. Thereafter, monitoring of the probes and passive vents will return to a quarterly schedule.

APPENDIX A

Figures

STATE OF TEXAS
JOHN Q. HARGROVE
65272
LICENSED
PROFESSIONAL ENGINEER
7/30/24

UV-1
GP-3
UV-2
GP-2
GP-1
GP-4
UV-3
GP-5
GP-12
GP-9
GP-6
GP-10A
GP-7
GP-8
GP-11

NOTES:

1. NAD 1983 2011 STATEPLANE TEXAS SOUTH CENTRAL FIPS 4204 FTUS

LEGEND

- GAS PROBE
- UTILITY VENT
- FENCE
- 2-FT INTERIM CONTOUR (FROM TECHMAP, 2019)
- 50 — 10-FT INDEX CONTOUR (FROM TECHMAP, 2019)
- STRUCTURES
- PERMIT BOUNDARY

N

0 300 600 900
SCALE IN FEET

BASEMAP SOURCE: MODIFIED FROM DWG PROVIDED BY TECHMAP (2019)

PREPARED FOR: GFL

DRAWING TITLE:
Figure 1
Gas Monitoring System Site Map

PREPARED BY: Hydrex Environmental

PROJECT SITE:
GREENBELT LANDFILL
PERMIT NO. 1586B
HARRIS COUNTY, TEXAS
TBPG FIRM NO. 50027

MAP DATE:	GIS ANALYST:	PROJECT NO.	FIGURE NO.
4/29/2024	JLD	L-09-1374	Figure 1

STATE OF TEXAS
JOHN Q. HARGROVE
65272
LICENSED PROFESSIONAL ENGINEER

7/24/24

LEGEND

- GAS PROBES
- STRUCTURES
- LANDFILL PERMIT BOUNDARY

0 200 400 600 800

SCALE IN FEET

N

PREPARED FOR: GFL	DRAWING TITLE: STRUCTURES AND GAS PROBES WITHIN 1,000 FEET OF GP-10A	PREPARED BY: Hydrex Environmental	PROJECT SITE: GREENBELT LANDFILL PERMIT NO. 1586B HARRIS COUNTY, TEXAS
		MAP DATE: 4/19/2023 / GIS ANALYST: JLD	PROJECT NO. L-11-1746 / FIGURE NO. Figure 2

STATE OF TEXAS
JOHN Q. HARGROVE
65272
LICENSED
PROFESSIONAL ENGINEER
7/24/24

BASEMAP SOURCE: 2020 AERIAL PROVIDED BY NAIP

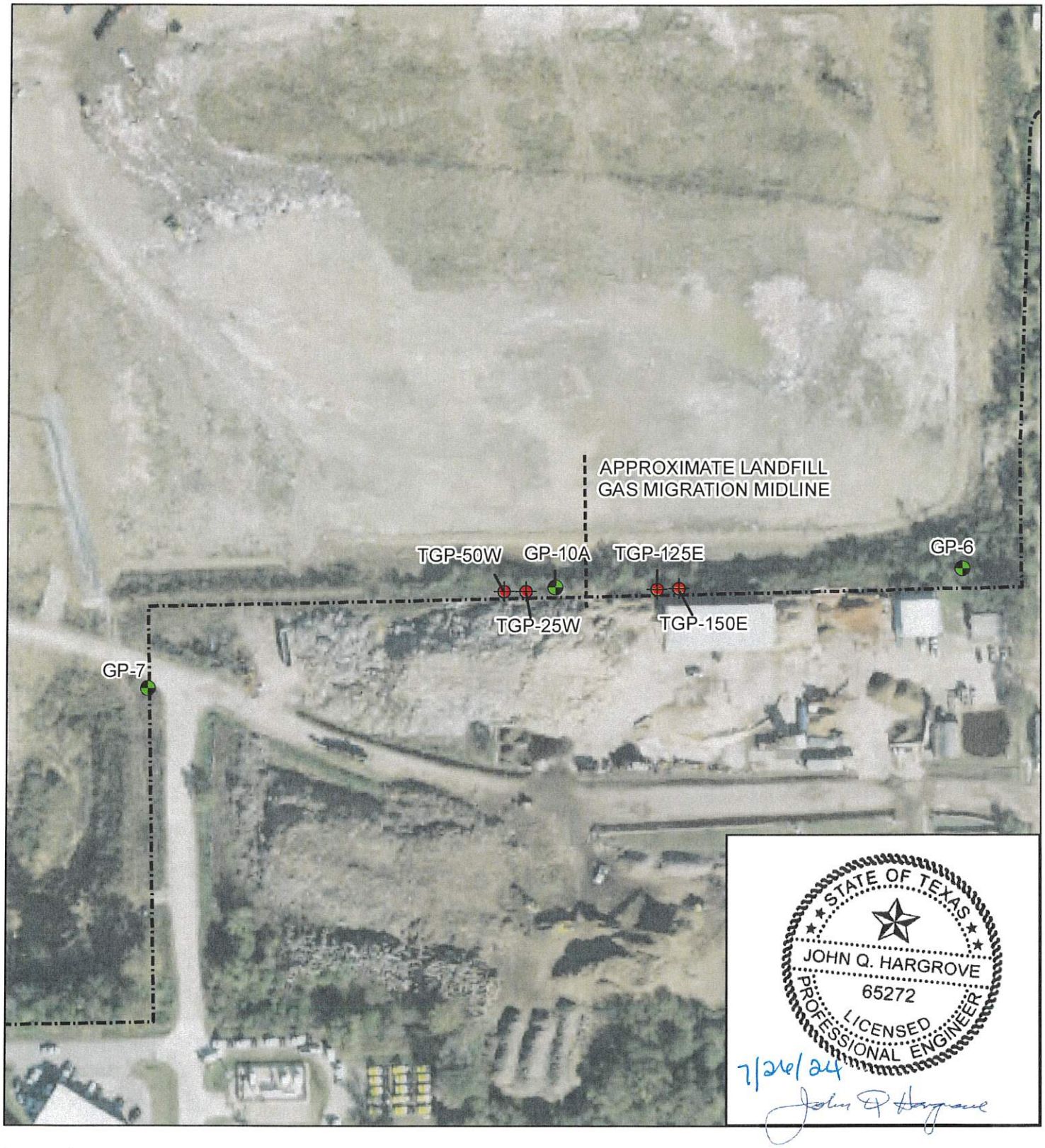
Legend

- SOIL BORING
- GAS PROBE
- PERMIT BOUNDARY

N

0 70 140 280 420 560 Feet

PREPARED FOR: GFL	DRAWING TITLE: SOIL BORING LOCATIONS FOR SOIL AS ASSESSMENT	PREPARED BY: Hydrex Environmental	PROJECT SITE: GREENBELT LANDFILL PERMIT NO. 1586B HARRIS COUNTY, TEXAS TBPG FIRM NO. 50027
		MAP DATE: 4/1/2024 / GIS ANALYST: JLD	PROJECT NO. L-11-1746 / FIGURE NO. Figure 3



STATE OF TEXAS
JOHN Q. HARGROVE
65272
LICENSED
PROFESSIONAL ENGINEER

7/26/24

John Q Hargrove

BASEMAP SOURCE: 2020 AERIAL PROVIDED BY NAIP

Legend

- TEMPORARY GAS PROBE
- GAS PROBE
- PERMIT BOUNDARY
- APPROXIMATE LANDFILL GAS MIGRATION MIDLINE

N

0 70 140 280 420 560 Feet

PREPARED FOR: GFL	DRAWING TITLE: TEMPORARY GAS PROBE LOCATIONS AND APPROXIMATE LANDFILL GAS MIGRATION MIDLINE	PREPARED BY: Hydrex Environmental	PROJECT SITE: GREENBELT LANDFILL PERMIT NO. 1586B HARRIS COUNTY, TEXAS TBPG FIRM NO. 50027
		MAP DATE: 4/1/2024 / GIS ANALYST: JLD	PROJECT NO. L-11-1746 / FIGURE NO. Figure 4

STATE OF TEXAS
JOHN Q. HARGROVE
65272
LICENSED
PROFESSIONAL ENGINEER
7/26/24

BASEMAP SOURCE: 2020 AERIAL PROVIDED BY NAIP

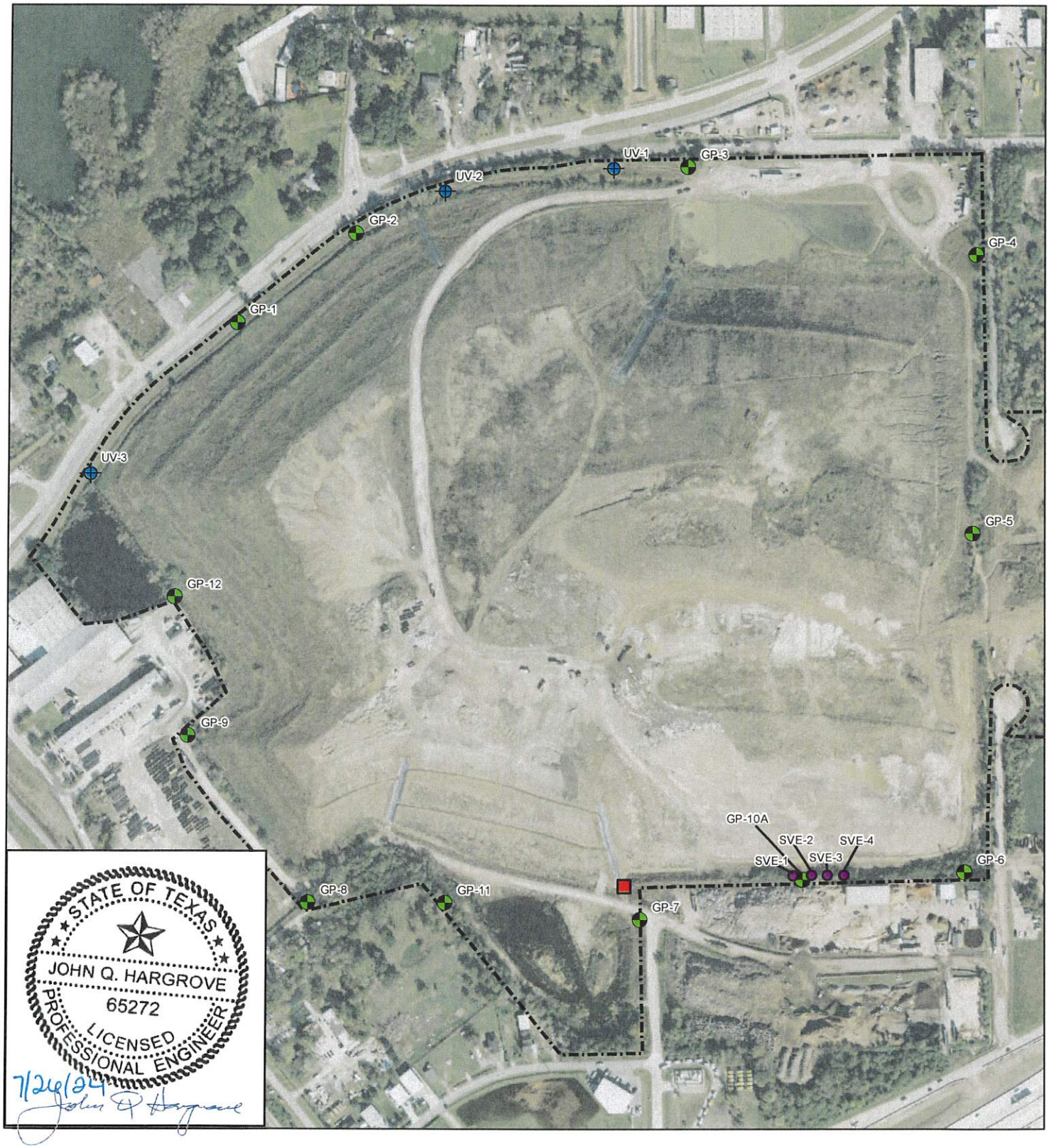
Legend

- TEMPORARY GAS PROBES
- PASSIVE VENT
- GAS PROBE
- APPROXIMATE MIDLINE
- PERMIT BOUNDARY

N

0 75 150 300 450 600 Feet

PREPARED FOR: GFL	DRAWING TITLE: GREENBELT PASSIVE VENT AND TEMPORARY GAS PROBE LOCATION MAP	PREPARED BY: Hydrex Environmental	PROJECT SITE: GREENBELT LANDFILL PERMIT NO. 1586B HARRIS COUNTY, TEXAS TBPG FIRM NO. 50027
		MAP DATE: 4/1/2024	GIS ANALYST: JLD
		PROJECT NO. L-11-1746	FIGURE NO. Figure 5



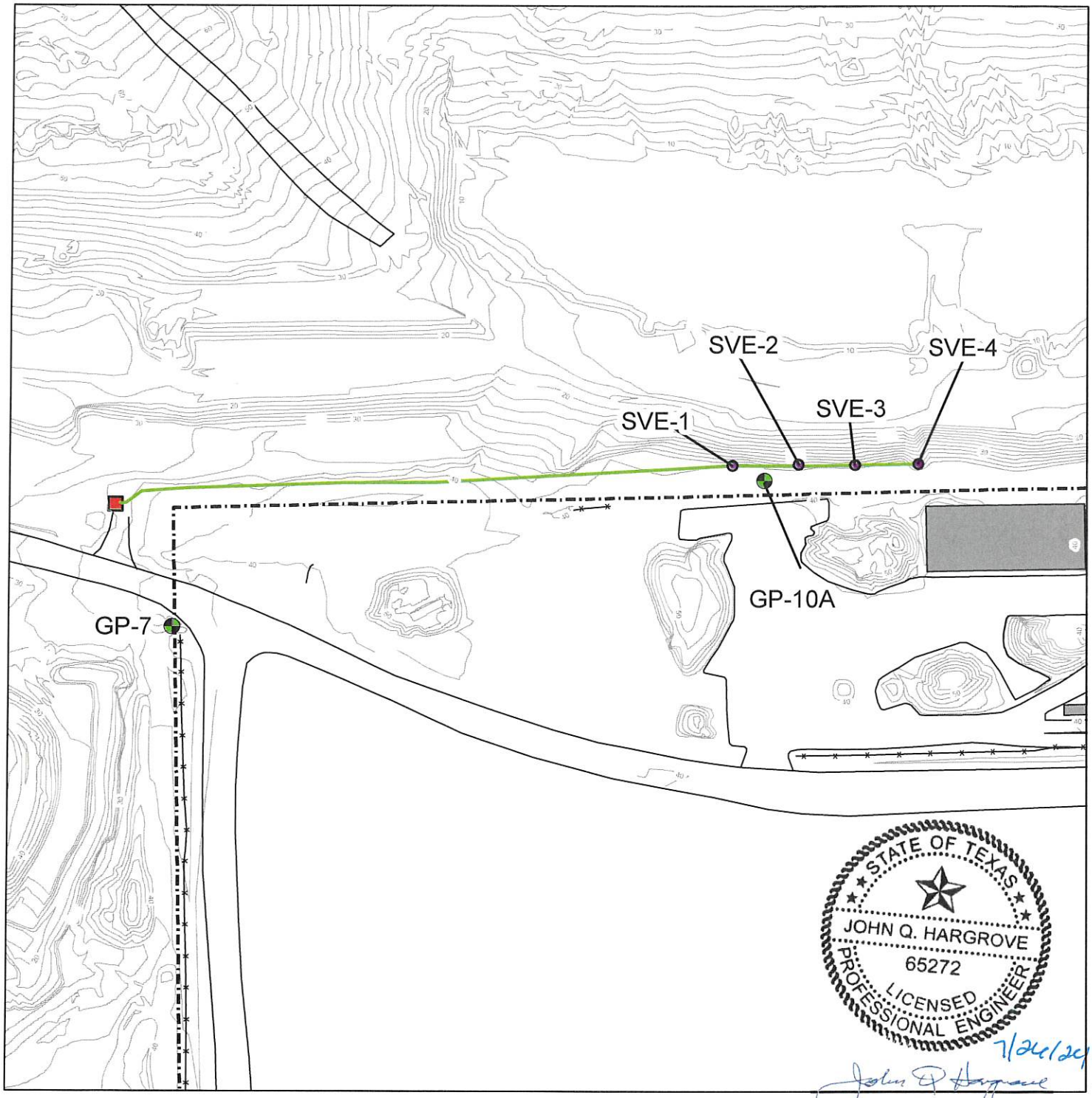
Legend

- TEMPORARY FLARE
- SOIL VAPOR EXTRACTION POINTS
- GAS PROBE
- UTILITY VENT
- PERMIT BOUNDARY

N

0 155 310 620 930 1,240 Feet

PREPARED FOR: GFL	DRAWING TITLE: GREENBELT LANDFILL SOIL VAPOR EXTRACTION POINT LOCATIONS	PREPARED BY: Hydrex Environmental	PROJECT SITE: GREENBELT LANDFILL PERMIT NO. 1586B HARRIS COUNTY, TEXAS TBPG FIRM NO. 50027
		MAP DATE: 4/1/2024 / GIS ANALYST: JLD	PROJECT NO. L-11-1746 / FIGURE NO. Figure 6



STATE OF TEXAS
JOHN Q. HARGROVE
65272
LICENSED
PROFESSIONAL ENGINEER
7/26/24

BASEMAP SOURCE: MODIFIED FROM DWG PROVIDED BY TECHMAP (2019)

Legend

- GAS PROBE
- SOIL VAPOR EXTRACTION POINTS
- SVE Connections
- ROADS
- FENCE
- STRUCTURES
- PERMIT BOUNDARY
- 2- FT INTERIM CONTOUR (FROM TECHMAP, 2019)
- 10- FT INTERIM CONTOUR (FROM TECHMAP, 2019)
- TEMPORARY FLARE

N

0 40 80 160 240 320 Feet

PREPARED FOR: GFL	DRAWING TITLE: GREENBELT LANDFILL SOIL VAPOR EXTRACTION CONNETIONS AND TEMPORARY FLARE LOCATIONS	PREPARED BY: Hydrex ENVIRONMENTAL	PROJECT SITE: GREENBELT LANDFILL PERMIT NO. 1586B HARRIS COUNTY, TEXAS TBPG FIRM NO. 50027
		MAP DATE: 4/19/2024 / GIS ANALYST: JLD	PROJECT NO. L-11-1746 / FIGURE NO. Figure 7

APPENDIX B

Tables

Greenbelt Landfill
MSW Permit No. 1586B
Table 1 - Summary Monitoring Data in GPs 6, 7, and 10A and Structures within 1,000 ft of GP-10A

Date	GP-6	GP-7	GP-10A	Structure 1	Structure 2	Structure 3	Structure 4	Structure 5
	% Methane	% Methane	% Methane	% Methane	% Methane	% Methane	% Methane	% Methane
2/21/2023[1]	ND	ND	58.3%	NM	NM	NM	NM	NM
2/22/2023[2]	ND	ND	31.70%	NM	NM	NM	NM	NM
2/23/2023[2]	ND	ND	39.60%	ND	ND	NA	ND	NA
2/24/2023[2]	ND	ND	24.40%	NM	NM	NM	NM	NM
2/25/2023[2]	ND	ND	15.70%	NM	NM	NM	NM	NM
2/27/2023[2]	ND	ND	71.30%	NM	NM	NM	NM	NM
2/28/2023[2]	ND	ND	31.20%	ND	ND	NM	NM	NM
3/6/2023	ND	ND	31.50%	ND	ND	NA	ND	NA
3/14/2023	ND	ND	36.00%	ND	ND	NA	ND	NA
3/22/2023	ND	ND	43.00%	ND	ND	NA	ND	NA
3/28/2023	ND	ND	37.0%	ND	ND	NA	ND	NA
4/4/2023	ND	ND	75.5%	ND	ND	NA	ND	NA
4/10/2023	ND	ND	35.4%	ND	ND	NA	ND	NA
4/20/2023	ND	ND	42.9%	ND	ND	NA	ND	NA
4/27/2023	ND	ND	79.5%	ND	ND	NA	ND	NA
5/4/2023	ND	ND	80.1%	ND	ND	NA	ND	NA
5/11/2023	ND	ND	72.4%	ND	ND	NA	ND	NA
5/15/2023	ND	ND	41.0%	ND	ND	NA	ND	NA
Passive Vents Installed 5/17/2023								
5/19/2023	NM	NM	0.1%	NM	NM	NM	NM	NM
5/25/2023	ND	ND	3.4%	ND	ND	NA	ND	NA
6/5/2023	ND	ND	ND	ND	ND	NA	ND	NA
6/13/2023	ND	ND	9.1%	ND	ND	NA	ND	NA
6/20/2023[1]	ND	ND	20.1%	ND	ND	NA	ND	NA
6/29/2023	ND	ND	8.0%	ND	ND	ND	ND	NA
7/6/2023	ND	ND	36.2%	ND	ND	ND	ND	NA
7/13/2023	0.1%	ND	46.1%	ND	ND	ND	ND	NA
7/18/2023	ND	2.00%	2.0%	ND	ND	ND	ND	NA
7/24/2023	ND	ND	75.7%	ND	ND	ND	ND	NA
8/2/2023	ND	ND	68.0%	ND	ND	ND	ND	NA
8/9/2023	ND	ND	84.0%	ND	ND	ND	ND	NA
8/15/2023	ND	ND	85.0%	ND	ND	ND	ND	NA
8/22/2023	ND	ND	63.20%	ND	ND	ND	ND	NA
8/28/2023	ND	ND	80.0%	ND	ND	ND	ND	NA
9/5/2023	ND	ND	36.0%	ND	ND	ND	ND	NA
9/13/2023	ND	ND	62.0%	ND	ND	ND	ND	NA
9/22/2023	ND	ND	75.2%	ND	ND	ND	ND	NA
9/25/2023[1]	ND	ND	70.5%	ND	ND	ND	ND	NA
10/5/2023	0.8%	ND	77.0%	ND	ND	ND	ND	NA

[1]Quarterly Event

[2] Daily Monitoring

[3]Quarterly and Semi-Monthly Event

[4] Semi-Monthly Monitoring

ND - Non Detectable

NM - Not Measured

NA - Not Accessible

Greenbelt Landfill
MSW Permit No. 1586B
Table 1 - Summary Monitoring Data in GPs 6, 7, and 10A and Structures within 1,000 ft of GP-10A

Date	GP-6	GP-7	GP-10A	Structure 1	Structure 2	Structure 3	Structure 4	Structure 5
	% Methane	% Methane	% Methane	% Methane	% Methane	% Methane	% Methane	% Methane
10/11/2023	ND	ND	76.7%	ND	ND	ND	ND	NA
10/19/2023	ND	ND	74.4%	ND	ND	ND	ND	NA
10/25/2023	ND	ND	73.0%	ND	ND	ND	ND	NA
10/31/2023	ND	ND	75.4%	ND	ND	ND	ND	NA
11/7/2023	ND	ND	76.1%	ND	ND	ND	ND	NA
11/14/2023	ND	ND	42.6%	ND	ND	ND	ND	NA
11/20/2023	ND	ND	76.7%	ND	ND	ND	ND	NA
11/29/2023	ND	ND	75.8%	ND	ND	ND	ND	NA
12/6/2023	ND	ND	68.5%	ND	ND	ND	ND	NA
12/13/2023[1]	ND	ND	75.5%	ND	ND	ND	ND	NA
12/20/2023	ND	ND	82.0%	ND	ND	ND	ND	NA
12/28/2024	ND	ND	63.0%	ND	ND	ND	ND	NA
1/3/2024	ND	ND	46.2%	ND	ND	ND	ND	NA
1/12/2024	ND	ND	4.1%	ND	ND	ND	ND	NA
1/18/2024	ND	ND	3.9%	ND	ND	ND	ND	NA
1/25/2024	ND	ND	74.8%	ND	ND	ND	ND	NA
2/2/2024	ND	ND	76.1%	ND	ND	ND	ND	NA
2/6/2024	ND	ND	61.9%	ND	ND	ND	ND	NA
2/12/2024	ND	ND	75.8%	ND	ND	ND	ND	NA
2/19/2024	ND	ND	77.4%	ND	ND	ND	ND	NA
Passive Vents Conversion to SVEs Completed on 2/29/2024								
2/29/2024	ND	ND	ND	ND	ND	ND	ND	NA
3/6/2024	ND	ND	ND	ND	ND	ND	ND	NA
3/13/2024	ND	ND	ND	ND	ND	ND	ND	NA
3/20/2024	ND	ND	ND	ND	ND	ND	ND	NA
3/27/2024[3]	ND	ND	ND	ND	ND	ND	ND	NA
4/10/2024[4]	ND	ND	ND	ND	ND	ND	ND	ND

[1]Quarterly Event

[2] Daily Monitoring

[3]Quarterly and Semi-Monthly Event

[4] Semi-Monthly Monitoring

ND - Non Detectable

NM - Not Measured

NA - Not Accessible

Greenbelt Landfill
MSW Permit No. 1586B
Table 2: Summary of Weekly Monitoring Data in Temporary Gas Probes and Passive Vents

Date	TGP-50W		TGP-25W		TGP-125E		TGP-150E		PV-1		PV-2		PV-3		PV-4	
	% Methane	Water Level	% Methane	Water Level	% Methane	Water Level	% Methane	Water Level	% Methane	Water Level	% Methane	Water Level	% Methane	Water Level	% Methane	Water Level
3/21-22/2023	0.1	Dry	50.5	Dry	12.0	Dry	ND	Dry	NA	NA	NA	NA	NA	NA	NA	NA
3/28/2023	ND	Dry	ND	Dry	47.0	Dry	ND	Dry	NA	NA	NA	NA	NA	NA	NA	NA
4/4/2023	47.3	Dry	74.6	Dry	42.2	Dry	16.3	Dry	NA	NA	NA	NA	NA	NA	NA	NA
4/10/2023	11	Dry	31.3	Dry	51.6	Dry	28.5	Dry	NA	NA	NA	NA	NA	NA	NA	NA
4/20/2023	48.80	Dry	36.10	Dry	55.50	Dry	22.00	Dry	NA	NA	NA	NA	NA	NA	NA	NA
4/27/2023	75.60	Dry	79.10	Dry	75.20	Dry	44.50	Dry	NA	NA	NA	NA	NA	NA	NA	NA
5/4/2023	18.50	Dry	79.30	Dry	79.70	Dry	76.60	Dry	NA	NA	NA	NA	NA	NA	NA	NA
5/11/2023	10.10	Dry	66.20	Dry	17.70	Dry	76.00	Dry	NA	NA	NA	NA	NA	NA	NA	NA
5/15/2023	76.00	Dry	79.10	Dry	66.20	Dry	17.70	Dry	NA	NA	NA	NA	NA	NA	NA	NA
Passive Vents Installed 5/17/2023																
5/19/2023	NM	NM	NM	NM	NM	NM	NM	NM	ND	Dry	ND	Dry	ND	Dry	3.40	Dry
5/25/2023	ND	Dry	2.40	Dry	14.10	Dry	33.50	Dry	ND	Dry	ND	Dry	ND	Dry	0.20	Dry
6/5/2023	ND	16.74	ND	16.02	ND	20.45	ND	20.52	ND	19.98	ND	20.22	ND	19.74	ND	22.35
6/13/2023	ND	Dry	ND	Dry	ND	Dry	ND	Dry	ND	Dry	ND	Dry	ND	Dry	0.20	Dry
6/20/2023*	15.30	18.38	44.40	14.40	40.30	10.10	37.00	10.80	0.30	Dry	ND	Dry	5.40	Dry	37.00	Dry
6/29/2023	9.40	18.81	38.90	Dry	45.20	18.21	30.10	18.15	0.10	Dry	ND	Dry	11.00	Dry	5.40	Dry
7/6/2023	5.70	Dry	35.60	18.15	44.20	18.21	30.00	18.15	0.10	Dry	0.10	Dry	9.20	Dry	2.30	Dry
7/13/2023	4.60	NM	19.80	NM	73.00	NM	73.40	NM	2.30	NM	0.80	NM	9.00	NM	6.90	NM
7/18/2023	0.30	Dry	2.20	Dry	1.65	19.06	ND	18.28	0.65	Dry	0.45	Dry	0.45	Dry	0.50	Dry
7/24/2023	ND	Dry	33.90	Dry	34.70	Dry	71.90	Dry	0.20	Dry	ND	Dry	ND	Dry	4.60	Dry
8/2/2023	0.50	Dry	35.00	Dry	37.70	Dry	69.30	Dry	0.50	Dry	ND	Dry	8.30	Dry	47.40	Dry
8/9/2023	21.00	18.78	ND	Dry	40.00	Dry	42.00	Dry	ND	Dry	ND	Dry	14.00	20.18	12.00	Dry
8/15/2023	ND	18.81	ND	18.90	31.00	Dry	ND	Dry	ND	23.69	ND	22.98	7.00	20.17	66.00	Dry
8/22/2023	21.60	18.75	9.80	18.76	ND	Dry	ND	Dry	ND	Dry	ND	Dry	3.90	Dry	0.70	Dry
8/28/2023	36.70	Dry	46.30	Dry	nd	Dry	ND	Dry	ND	Dry	ND	Dry	4.40	Dry	2.10	Dry
9/5/2023	1.60	NM	1.40	NM	0.20	NM	ND	NM	0.40	NM	0.30	NM	2.20	NM	0.50	NM
9/13/2023	7.04	NM	20.00	NM	15.40	NM	ND	NM	25.00	NM	15.00	NM	30.00	NM	5.45	NM
9/22/2023	18.60	Dry	9.30	Dry	25.70	Dry	10.20	Dry	5.50	Dry	0.40	Dry	3.20	Dry	1.40	Dry
9/25/20231	43.00	19.86	41.00	19.50	10.00	16.50	ND	10.03	15.00	19.98	10.00	Dry	9.34	20.56	16.45	Dry
10/5/2023	67.00	Dry	56.00	19.28	1.80	16.29	ND	7.16	10.00	20.02	7.00	19.83	18.40	20.02	28.20	Dry
10/11/2023	25.80	20.00	21.80	19.79	45.30	20.00	9.60	17.89	1.60	21.09	0.60	20.25	4.30	20.17	2.90	20.10
10/19/2023	33.10	Dry	36.00	18.82	66.20	Dry	55.40	Dry	1.30	Dry	0.80	Dry	5.80	Dry	4.30	Dry
10/25/2023	19.00	Dry	ND	Dry	20.00	Dry	17.00	Dry	2.75	Dry	1.55	Dry	8.00	20.50	1.40	Dry
10/31/2023	0.00	Dry	30.00	Dry	57.10	Dry	31.00	Dry	1.50	Dry	1.20	Dry	5.90	Dry	2.90	Dry
11/7/2023	17.80	20.10	20.50	20.00	41.90	20.02	33.10	20.00	0.70	21.05	0.30	21.02	2.60	22.10	2.50	21.96
11/14/2023	65.20	Dry	65.80	19.59	68.70	Dry	8.70	12.99	4.70	23.22	2.70	Dry	6.80	21.21	6.80	Dry
11/20/2023	54.20	Dry	59.80	Dry	54.60	Dry	15.60	Dry	4.40	Dry	2.30	Dry	7.80	Dry	4.50	Dry
11/29/2023	50.20	Dry	49.70	Dry	51.30	Dry	16.24	Dry	1.20	22.54	1.00	Dry	3.40	Dry	1.50	Dry
12/6/2023	16.70	19.50	8.20	20.50	24.30	21.06	8.50	21.01	10.10	21.12	2.10	20.98	1.00	21.10	0.50	21.31
12/13/20231	43.00	20.01	44.30	20.00	64.10	20.50	34.40	20.90	2.70	21.90	0.90	21.20	5.90	21.20	4.60	21.10
12/20/2023	64.00	Dry	53.00	Dry	31.00	Dry	12.00	Dry	3.00	Dry	2.20	Dry	6.00	Dry	3.00	Dry

[1]Quarterly Event
[2]Quarterly and Semi-Monthly Event
[3] Semi-Monthly Monitoring
ND - Non Detectable
NM - Not Measured
NA - Not Accessible

Hydrex ENVIRONMENTAL

Greenbelt Landfill
MSW Permit No. 1586B
Table 2: Summary of Weekly Monitoring Data in Temporary Gas Probes and Passive Vents

Date	TGP-50W		TGP-25W		TGP-125E		TGP-150E		PV-1		PV-2		PV-3		PV-4	
	% Methane	Water Level	% Methane	Water Level	% Methane	Water Level	% Methane	Water Level	% Methane	Water Level	% Methane	Water Level	% Methane	Water Level	% Methane	Water Level
12/28/2024	58.70	Dry	50.50	Dry	30.20	Dry	11.90	Dry	5.10	Dry	38.40	Dry	6.50	Dry	3.80	Dry
1/3/2024	5.10	Dry	60.30	Dry	24.80	Dry	50.30	Dry	1.20	Dry	0.10	Dry	5.20	Dry	3.00	Dry
1/12/2024	ND	9.05	0.10	19.51	ND	Dry	ND	Dry	0.30	19.33	0.40	19.34	0.80	19.40	ND	19.41
1/18/2024	ND	Dry	ND	Dry	ND	Dry	ND	Dry	0.10	Dry	0.20	Dry	0.30	Dry	ND	Dry
1/25/2024	2.00	11.15	27.30	11.10	44.60	Dry	19.30	Dry	9.30	Dry	0.90	Dry	14.30	Dry	10.20	Dry
2/2/2024	7.10	17.36	40.80	19.15	56.90	Dry	27.30	Dry	2.90	Dry	0.50	Dry	8.80	Dry	8.30	Dry
2/6/2024	37.10	20.42	57.00	Dry	0.40	17.33	10.10	11.00	1.90	NM	0.30	NM	7.70	NM	6.20	NM
2/12/2024	18.70	9.47	48.40	17.90	63.70	Dry	32.10	Dry	2.80	21.34	0.30	22.47	11.00	19.99	3.40	23.55
2/19/2024	20.40	6.72	60.10	16.94	76.10	Dry	51.50	Dry	5.20	21.60	0.70	22.55	10.20	20.06	12.10	23.2
Passive Vents Conversion to SVEs Completed on 2/29/2024																
									SVE-1		SVE-2		SVE-3		SVE-4	
									% Methane	Pressure ("H2O)	% Methane	Pressure ("H2O)	% Methane	Pressure ("H2O)	% Methane	Pressure ("H2O)
2/29/2024	ND	Dry	ND	Dry	ND	Dry	ND	Dry	55.80	-17.70	56.00	-17.69	68.80	-17.69	70.10	-17.71
3/6/2024	ND	Dry	ND	Dry	ND	Dry	ND	Dry	10.10	-20.38	30.30	-20.49	52.80	-20.17	41.10	-20.05
3/13/2024	ND	Dry	ND	Dry	ND	Dry	ND	Dry	9.70	-21.31	32.40	-21.14	45.10	-21.15	34.70	-21.04
3/20/2024	0.01	21.20	ND	21.30	ND	20.90	ND	21.20	57.60	-19.55	63.90	-19.94	71.00	-19.91	52.30	-19.93
3/27/2024[2]	ND	Dry	ND	Dry	ND	Dry	ND	Dry	11.10	-24.51	32.10	-24.61	55.50	-24.48	40.70	-23.89
4/10/2024[3]	ND	19.77	ND	14.25	ND	20.71	ND	19.92	6.80	-19.80	25.80	-25.66	52.80	-25.03	32.00	-25.44

[1]Quarterly Event

[2]Quarterly and Semi-Monthly Event

[3] Semi-Monthly Monitoring

ND - Non Detectable

NM - Not Measured

NA - Not Accessible

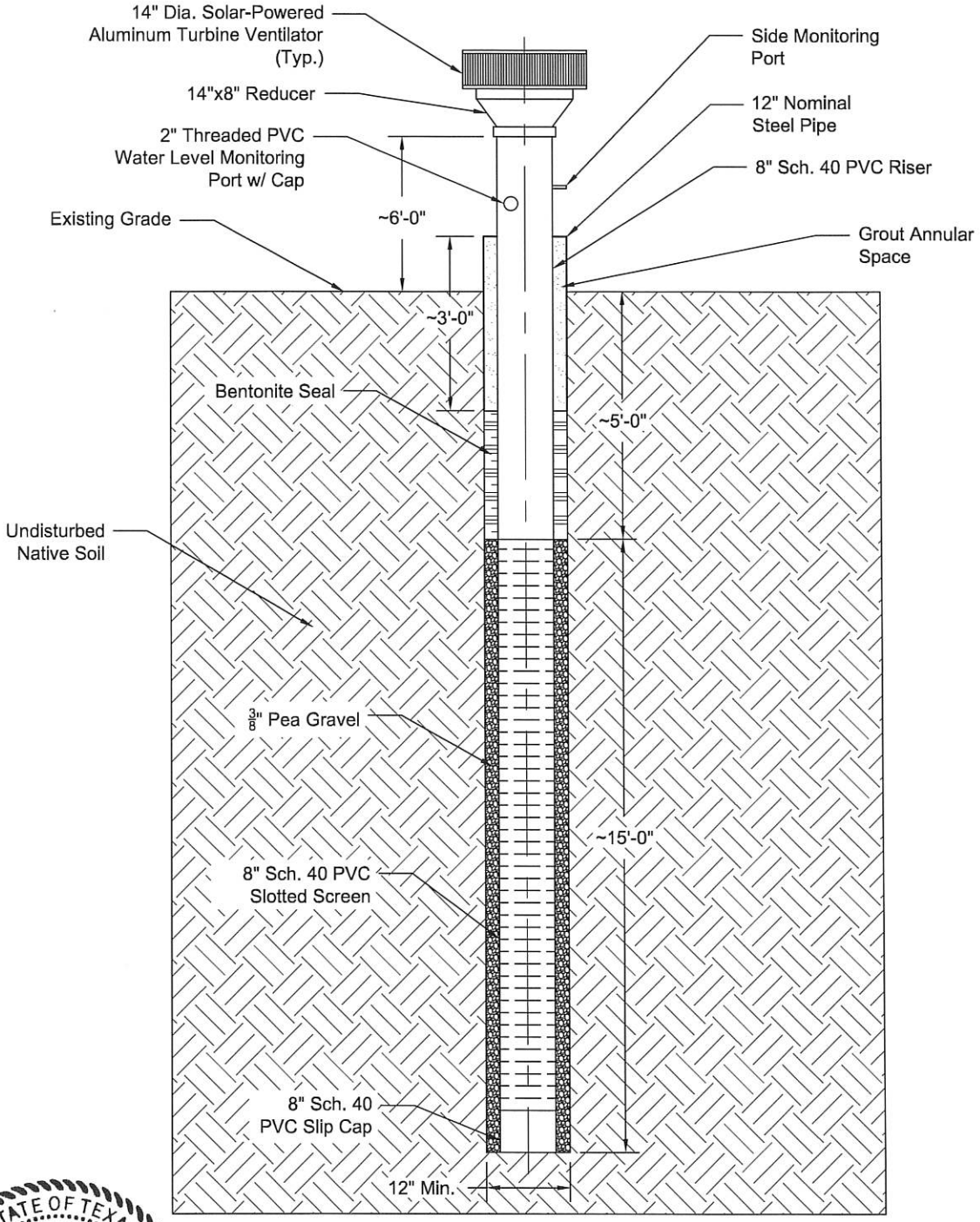
Greenbelt Landfill
MSW Permit No. 1586B
Table 3 - Soil Methane Assessment March 2023

Point Data	Methane Concentration (Volume Percent) a Depth bgs						
	20'	17'	14'	11'	8'	5'	2'
SB-25W	ND	50.5	47.3	47.6	47.4	20.3	20.4
SB-50W	ND	ND	0.1	ND	ND	ND	ND
SB-100W	ND	ND	ND	0.7	ND	ND	ND
SB-100E	ND	ND	68.1	59.3	57.1	45.3	20.1
SB-125E	ND	ND	12	10	4.3	2.4	ND
Sb-150E	ND	ND	ND	ND	ND	ND	ND

ND - Non Detectable

Hydrex ENVIRONMENTAL

APPENDIX C



STATE OF TEXAS
GEOFFREY D. SANDERS
140245
LICENSED PROFESSIONAL ENGINEER

04/20/2023

Geoffrey D. Sanders

PASSIVE VENT DETAIL

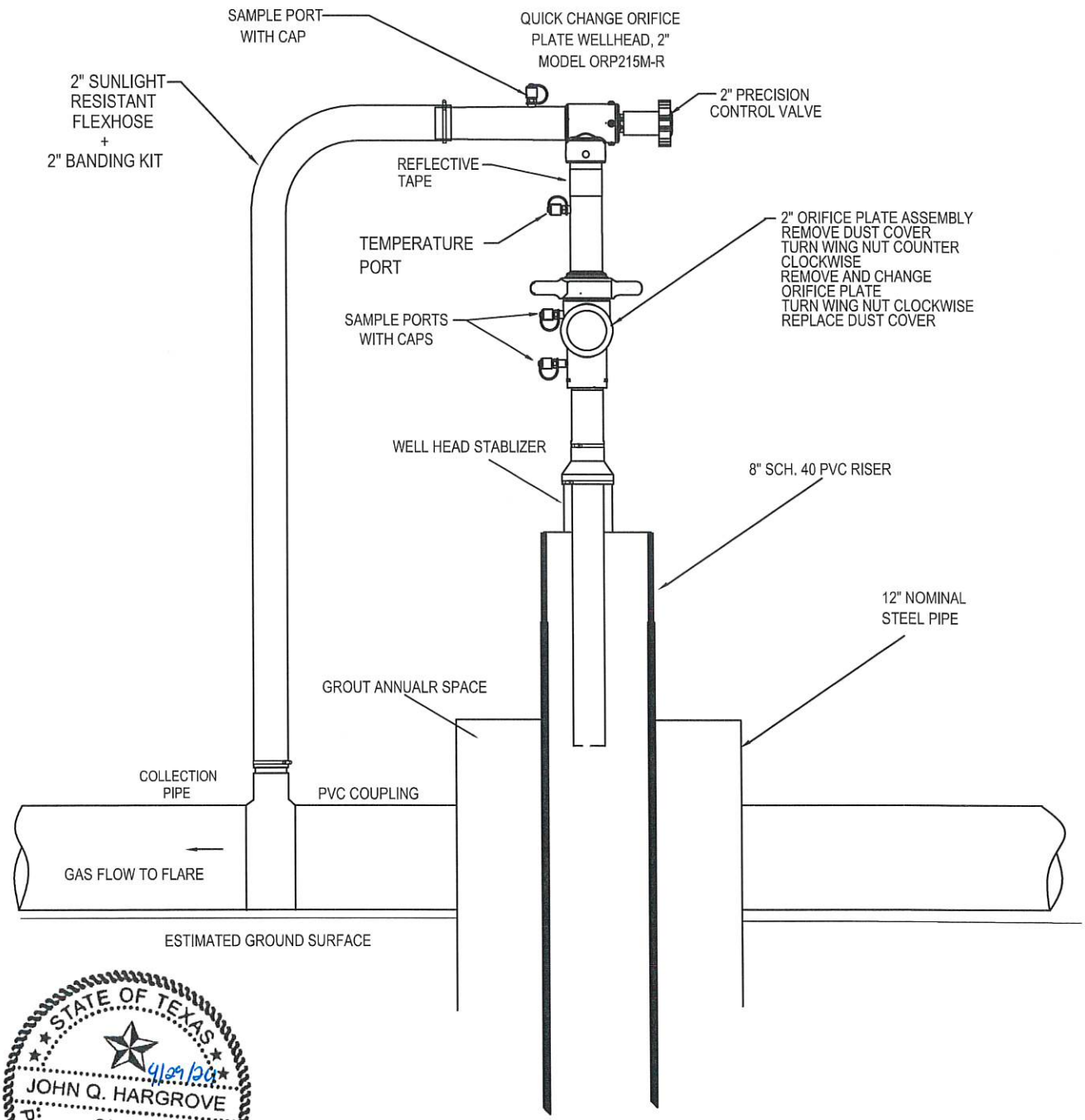
SCALE: N.T.S.

Hydrex ENVIRONMENTAL
TBPELS ENG. FIRM NO. F-13588 • TBPG FIRM NO. F-50027
312 OLD TYLER ROAD • NACOGDOCHES, TX 75961 • (936) 568-9457

PASSIVE VENT CONSTRUCTION DETAIL

GREENBELT LANDFILL
HOUSTON, TEXAS

DSN. GDS	JOB NO.: L-09-1374
DWN. GDS	DATE: 04/20/2023
CHK. LNS	SCALE: AS SHOWN



STATE OF TEXAS
JOHN Q. HARGROVE
65272
LICENSED PROFESSIONAL ENGINEER
4/24/24

MODIFIED FROM QED

Hydrex ENVIRONMENTAL
TBPELS ENG. FIRM NO. F-13588 TBPG FIRM NO. F-50027
312 OLD TYLER ROAD NACOGDOCHES, TX 75961 (936) 568-9457

GREENBELT LANDFILL
SOIL VAPOR EXTRACTION POINT
CONSTRUCTION DETAILS

DSN. JLD	JOB NO.: L-11-1746
DWN. JLD	DATE: 4/23/2024
CHK. JQH	SCALE: NOT TO SCALE

APPENDIX D

Relevant Correspondence

Hydrex
ENVIRONMENTAL

February 28, 2023

Ms. Megan Henson, Manager
MSW Permits Section
Waste Permit Division
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Re: Quarterly Methane Monitoring Results (Q1 – 2023) and Notification of Exceedance in GP-10A
Greenbelt Landfill
MSW Permit No. 1586A
Harris County, Texas
RN101287852; CN602528804

Dear Ms. Henson,

Enclosed are the results of the required methane monitoring at the above-referenced facility. Quarterly methane monitoring was conducted on February 21, 2023. This event represents the 1st quarterly methane monitoring event for 2023. The results of the quarterly methane monitoring event and a gas probe location map are included in Appendix A of this report.

GP-10A Exceedance and Notifications
During the regularly scheduled 1st quarterly methane monitoring event, methane was detected at 58.3 volume percent in gas monitoring probe GP-10A. This value is in excess of the regulatory limit of five volume-percent as specified in the 30 TAC §330.371 (a)(2). **No other probes at the above-referenced facility were noted to be out of compliance during the quarterly event.** As required by the Landfill Gas Management Plan (LFGMP) all actions were completed to protected human health. Notifications were made verbally and via e-mail to landfill personnel, TCEQ (Allison Owen), Pasadena Chief of Police (Josh Bruegger), and attempts were made to contact the Pasadena Fire Department. In addition, letters of notification were sent to neighboring property owners within 1,000 feet of the exceedance on February 22, 2023. Copies of these correspondences are provided in Appendix B of this report.

Follow-up Events for GP-10A
As required by the LFGMP daily follow-up readings at GP-10A were taken for one week (February 21-28, 2022). Results of these follow-up readings are included in Appendix C of this report. Follow-up readings in gas probe GP-10A indicated continued exceedance of the regulatory limit of five-volume percent. As required by the LFGMP laboratory a sample of gas from GP-10A was collected on February 27, 2023. The results of the gas analysis (method T0-14) will be submitted under a separate cover. Additional efforts, pending results of T0-14 analysis, will be made to determine the extent of the explosive gas migration as necessary.

1120 NW Stallings Drive
Nacogdoches, TX 75964-3428
printed on recycled paper
936-568-9451
Fax 936-568-9527

Furthermore, as required by the LFGMP, structures within 1,000 feet of GP-10A were monitored and will continue to be monitored on a weekly basis until explosive gas readings in the vicinity subside. A map of property owners and structures within 1,000 feet are included in Appendix C of this report. No methane was detected in any of the facility structures or in any of the off-property structures within 1,000 feet of GP-10A.

This correspondence is being made as required by TCEQ approved LFGMP *Section 7.2 Actions Within Seven Days to Update the Operating Record* and in accordance with 30 TAC §330.125 and 30 TAC §330.371. Additionally, in accordance with the LFGMP *Section 7.3 Action Within 60 Days to Implement a Remediation Plan* a remediation plan will be submitted within the prescribed time frame. If you have any questions or comments concerning this information, please contact me at (936) 568-9451.

Sincerely,
Hydrex Environmental

Jordan L. DiMezzo
Geologist

Appendices:

Appendix A
- Q1 2023 Monitoring Data
- Gas Monitoring Probe Locations
- Instrument Calibration Documentation

Appendix B
- Notification of Exceedance to TCEQ Austin
- Notification of Exceedance to Pasadena Police Department
- Notification of Exceedance to Property Owners within 1,000 feet of GP-10A
- Results of Daily Follow-up Readings at GP-10A

Appendix C
- Map of Property Owners within 1,000 feet of GP-10A
- Map of Structures within 1,000 feet of GP-10A

Distribution:

1 + Original	MC-124 Ms. Megan Henson, Manager MSW Permits Section Waste Permits Division Texas Commission on Environmental Quality P.O. Box 13087 Austin, TX 78711-3087
E-copy	Mr. Steven Howard GFL Environmental Regional Environmental Compliance Manager 18511 Beaumont Hwy Houston, TX 77049
(1)	Greenbelt Landfill 550 Old Genoa Red Bluff Rd Houston, TX 77034
E-copy	Hydrex Environmental 1120 NW Stallings Drive Nacogdoches, TX 75964

Appendix A

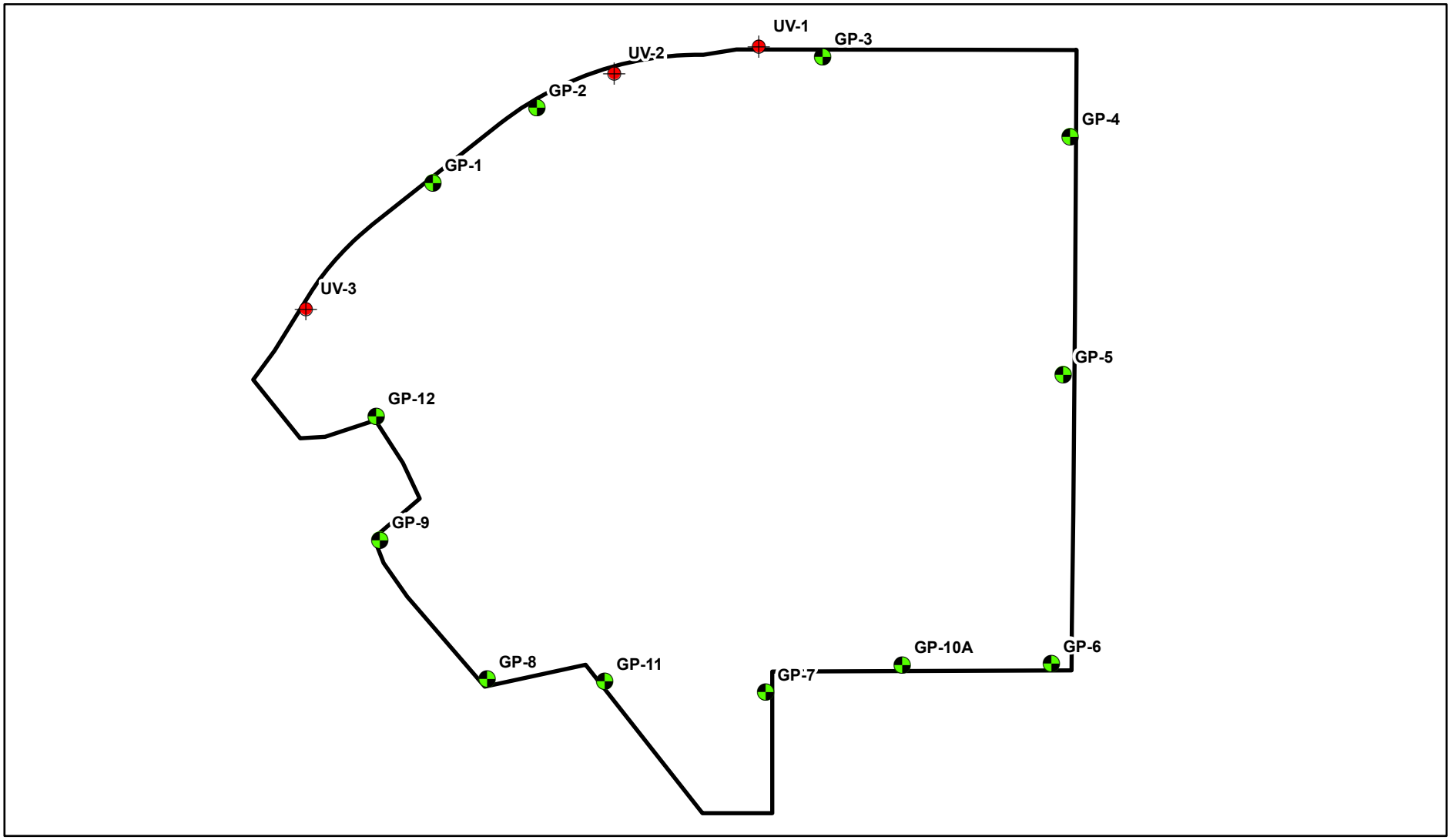
Hydrex Environmental
Greenbelt Landfill
Quarterly Landfill Gas Monitoring Report

Site:	Greenbelt	**Meteorological Data**					
MSW Permit No.	1586A	Barometric Pressure (in Hg):	29.85		Temperature:	78°F	
Personnel:	LK				Weather:	Cloudy, Windy	
Date:	2/21/2023						
Instrumental Data							
Pressure Gauge Model:		GEM 5000			Start Date/Time	2/21/23 10:35	
Gas Meter Model:		GEM 5000					
Water Level Model:		Solinst 102					
Calibration Date/Time:		2/21/2023					

PROBE NO.	% Volume METHANE	% Volume O_2	% Volume CO_2	PRESSURE in. WC	DEPTH TO GROUNDWATER (from top of casing in ft.)	PROBE INTEGRITY VERIFIED (yes/no)	Comments
GP-01	ND	18.9	4.0	0.01	14.62	Yes	
GP-02	ND	19.4	0.5	0.03	13.50	Yes	
GP-03	ND	19.6	ND	0.01	12.30	Yes	
GP-04	ND	20.2	ND	0.00	5.71	Yes	
GP-05	ND	18.4	0.5	0.00	19.22	Yes	
GP-06	ND	19.3	ND	0.00	15.95	Yes	
GP-07	ND	19.5	ND	0.02	14.56	Yes	
GP-08	ND	18.9	ND	0.01	13.00	Yes	
GP-09	ND	16.7	0.4	0.03	9.85	Yes	
GP-10A	58.3	5.0	13.2	0.03	28.10	Yes	
GP-11	ND	20.1	ND	-0.01	7.23	Yes	
GP-12	ND	20.1	0.3	0.02	5.25	Yes	
UV-1	ND	20.2	ND	0.00	NA	Yes	
UV-2	ND	20.5	ND	0.00	NA	Yes	
UV-3	ND	20.2	ND	0.00	NA	Yes	

Structure	% Volume Methane	Comments
Scale House/Gate House	ND	Methane monitor operational

ND = Non-Detectable
NA = Not Available



Hydrex ENVIRONMENTAL
1120 NW Stallings Drive
Nacogdoches, Texas 75964
(936) 568-9451

FIGURE 1

GAS PROBE LOCATION MAP

GFL

GFL ENVIRONMENTAL, INC.
GREENBELT LANDFILL
PERMIT NO. 1586A
HARRIS COUNTY, TEXAS

Map Revised: 02/28/2023	Project Number: L-09-1374	GIS Analyst: JLD

DAILY GAS METER CALIBRATION LOG

Date: 2/21/2023

Site: Greenbelt Landfill

Technician: Lucas Kahn

Gas Meter SN: G505496

Gas Meter Type: G5000

Calibration Info

Time: 10:30 Temp: 78 °F

"HIGH" 50% CH4 / 35% CO2 / Balance Gas LOT # 304-401851835-1

Cainster Expiration Date: 8/4/2024

GAS METER READING AFTER CALIBRATION: CH4% 50%

"LOW" 15% CH4 / 15% CO2 / Balance Gas LOT # 304-402020793-1

Cainster Expiration Date: 1/29/2025

GAS METER READING AFTER CALIBRATION: CH4% 15%

CERTIFICATION OF CALIBRATION

PJLA Calibration
No. 66916

QED™

Date Of Calibration: 10-Feb-2023

Certificate Number: G505496_10/45644

Issued by: QED Environmental Systems Inc.

Customer: **Hydrex Environmental Inc**
1120 NW Stallings Drive Nacogdoches, TX 75964-3428 USA

Description: Landtec Gas Analyzer

Model: GEM5000

Serial Number: G505496

Accredited Results:

Methane (CH4)

Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.0	4.8	0.42
15.0	14.7	0.66
50.0	49.3	1.03

Carbon Dioxide (CO2)

Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.0	4.8	0.43
15.1	14.7	0.71
50.0	50.0	1.19

Oxygen (O2)

Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
21.0	21.0	0.25

Gas cylinders are traceable and details can be provided if requested.

CH4, CO2 readings recorded at: 30.8 °C/87.4 °F

O2 readings recorded at: 21.6 °C/70.8 °F

Barometric Pressure: 0988"Hg/29.17 "Hg

Method of Test : The analyzer is calibrated in a temperature controlled chamber using a series of reference gases, in compliance with procedure ISP17.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with NIST requirements.

www.qedenv.com (800) 624-2026 info@qedenv.com

QED Environmental Systems Inc. 2355 Bishop Circle West, Dexter, MI 48130

CERTIFICATION OF CALIBRATION

PJLA Calibration
No. 66916

QED

Date Of Calibration: 10-Feb-2023

Certificate Number: G505496_10/45644

Issued by: QED Environmental Systems Inc.

Non Accredited results:

Pressure Transducers (inches of water column)					
Transducer	**Certified (Low)**	**Reading (Low)**	**Certified (High)**	**Reading (High)**	**Accuracy**
Static	0"	0"	40"	40.35"	2.0"
Differential	0"	0"	4"	3.95"	0.7"

Barometer (mbar)	
Reference	**Instrument Reading**
0988 mbar / 29.17 "Hg	0988 mbar / 29.18 "Hg

As received gas check readings:

Methane (CH4)	
Certified Gas (%)	**Instrument Reading (%)**
5.0	6.9
15.0	23.5
50.0	70.3

Carbon Dioxide (CO2)	
Certified Gas (%)	**Instrument Reading (%)**
5.0	7.4
15.1	31.2
50.0	100.0

Oxygen (O2)	
Certified Gas (%)	**Instrument Reading (%)**
21.0	19.8

As received Gas readings recorded at: 30.8 °C/87.4 °F

As received Barometric Pressure recorded at: 21.6 °C/70.8 °F

As received gas check readings are only recorded if the instrument is received in a working condition. Where the instrument is received damaged no reading can be taken.

Date of Issue : 13 Feb 2023

Approved By Signatory

Kyle Racine

Laboratory Inspection

www.qedenv.com (800) 624-2026 info@qedenv.com

QED Environmental Systems Inc. 2355 Bishop Circle West, Dexter, MI 48130

Appendix B

Jordan Scarborough

From: Jordan Scarborough
Sent: Wednesday, February 22, 2023 11:02 AM
To: [redacted]
Subject: Greenbelt Landfill GMP-10A Follow Up Email

Good morning Ms. Owen,

I wanted to provide a follow up email regarding GMP-10A at Greenbelt Landfill.

As, we discussed yesterday, GMP-10A at Greenbelt landfill had an exceedance of 58.3 percent volume. Immediate actions to protect human health were completed. Additionally, in accordance with applicable regulation, remediation efforts are currently underway, and a remediation plan documenting the nature and extent of the exceedance and the proposed remedy will be submitted within the prescribed timeframe.

Please let me know if you have any questions.

Respectfully,

Jordan DiMezzo
Geologist
Hydrex Environmental
1120 NW Stallings Drive
Nacogdoches, Texas 75964
Office: 936-568-9451
Cell: 936-552-6020
Fax: 936-568-9527
J[redacted]
www.hydrexenvironmental.com

Jordan Scarborough

From: Jordan Scarborough
Sent: Wednesday, February 22, 2023 11:08 AM
To: [redacted]
Subject: Notification of Methane Exceedance at Greenbelt Landfill

Good morning Mr. Brugger,

The following notification of methane exceedance is being provided to you in accordance with the approved Landfill Gas Management Plan (LFGMP) for Greenbelt Landfill (MSW Permit No. 1586) and as required by applicable regulation (30 TAC §330.371). **This correspondence is provided for notification purposes only and no response is required.** Specifically, you are being notified because you are a county official.

During a regularly scheduled methane monitoring event performed on February 21, 2023, methane was detected at 58.3 volume percent in gas monitoring probe GMP-10A. This value is in excess of the regulatory limit of 5 volume percent as specified in 30 TAC §330.371(a)(2). No other probes were noted to be out of compliance.

Based on the exceedance, implementation of the contingency plan in accordance with the facility's LFGMP was initiated. Additionally, in accordance with applicable regulation, remediation efforts are currently underway and a remediation plan documenting the nature and extent of the exceedance and the proposed remedy will be submitted to the Texas Commission on Environmental Quality within the prescribed timeframe**.**

Again, no response by any county official is required.

If you have any questions or require any additional information, please do not hesitate to contact me at (936) 568-9451.

Respectfully,

Jordan DiMezzo
Geologist
Hydrex Environmental
1120 NW Stallings Drive
Nacogdoches, Texas 75964
Office: 936-568-9451
Cell: 936-552-6020
Fax: 936-568-9527
[redacted]
www.hydrexenvironmental.com

Memo

To: **To Whom It May Concern**

From: **Jordan L. DiMezzo**

Date: **February 21, 2023**

Re: **Greenbelt Landfill 1st Quarterly Methane Monitoring Event for 2023 GMP-10A Exceedance**

During the 1st Quarterly event for Fort Bend Regional Landfill, GMP-10A was noted as exceeding the 5% allowable limit of methane with a concentration of 58.3%. This value was measured at 11:19 am by Lucas Kahan.

Notification was made to Steve Howard on 2/21/2023.

Attempts were made to contact Pasadena Fire @ 713-475-5554 on 2/21/2023 – No one answered and I left a voice mail at 12:48.

Jordan L. DiMezzo
Geologist

Hydrex
ENVIRONMENTAL

February 22, 2023

Freedom Fuel Operating LLC
6002 Debbielou Gardens Dr
Houston, TX 77034-2900

Re: Reporting of Methane Exceedance
Greenbelt Landfill
Permit No. MSW 1586
Harris County, Texas

To whom it may concern:

The following notification of methane exceedance is being provided to you in accordance with the approved Landfill Gas Management Plan for the above-referenced facility and as required by applicable regulation (30 TAC §330.371). **This correspondence is provided for notification purposes only and no response is required.** Specifically, you are being notified because you are a public entity or official listed in the permit, or you are listed as an owner of a property within 1,000 feet of the observed exceedance.

During a regularly scheduled methane monitoring event performed on February 21, 2023, methane was detected at 58.3 volume percent in gas monitoring probe GP-10A. This value is in excess of the regulatory limit of 5 volume percent as specified in 30 TAC §330.371(a)(2). No other probes were noted to be out of compliance.

Implementation of the contingency plan in accordance with the facility's permit was initiated, starting with notification of necessary parties. Additionally, in accordance with applicable regulation, remediation efforts are currently underway, and a remediation plan documenting the nature and extent of the exceedance and the proposed remedy will be submitted to the Texas Commission on Environmental Quality within the prescribed timeframe.

If you have any questions or require any additional information, please do not hesitate to contact me at (936) 568-9451.

Sincerely,
Hydrex Environmental

Leonell N. Scarborough, P.G.
Senior Hydrogeologist

1120 NW Stallings Drive
Nacogdoches, TX 75964-3428
printed on recycled paper
936-568-9451
Fax 936-568-9527

Hydrex Environmental

February 22, 2023

Lubrizol Corporation
PO Box 158
Deer Park, TX 77536-0158

Re: Reporting of Methane Exceedance
Greenbelt Landfill
Permit No. MSW 1586
Harris County, Texas

To whom it may concern:

The following notification of methane exceedance is being provided to you in accordance with the approved Landfill Gas Management Plan for the above-referenced facility and as required by applicable regulation (30 TAC §330.371). **This correspondence is provided for notification purposes only and no response is required.** Specifically, you are being notified because you are a public entity or official listed in the permit, or you are listed as an owner of a property within 1,000 feet of the observed exceedance.

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If you have any questions or require any additional information, please do not hesitate to contact me at (936) 568-9451.

Sincerely,
Hydrex Environmental

Leonell N. Scarborough, P.G.
Senior Hydrogeologist

1120 NW Stallings Drive
Nacogdoches, TX 75964-3428
936-568-9451
Fax 936-568-9527

Hydrex
ENVIRONMENTAL

February 22, 2023

Lubrizol Corporation
PO Box 158
Deer Park, TX 77536-0158

Re: Reporting of Methane Exceedance
Greenbelt Landfill
Permit No. MSW 1586
Harris County, Texas

To whom it may concern:

The following notification of methane exceedance is being provided to you in accordance with the approved Landfill Gas Management Plan for the above-referenced facility and as required by applicable regulation (30 TAC §330.371). **This correspondence is provided for notification purposes only and no response is required.** Specifically, you are being notified because you are a public entity or official listed in the permit, or you are listed as an owner of a property within 1,000 feet of the observed exceedance.

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Implementation of the contingency plan in accordance with the facility's permit was initiated, starting with notification of necessary parties. Additionally, in accordance with applicable regulation, remediation efforts are currently underway, and a remediation plan documenting the nature and extent of the exceedance and the proposed remedy will be submitted to the Texas Commission on Environmental Quality within the prescribed timeframe.

If you have any questions or require any additional information, please do not hesitate to contact me at (936) 568-9451.

Sincerely,
Hydrex Environmental

Leonell N. Scarborough, P.G.
Senior Hydrogeologist

1120 NW Stallings Drive
Nacogdoches, TX 75964-3428
936-568-9451
Fax 936-568-9527

Hydrex
ENVIRONMENTAL

February 22, 2023

Novus Systems INC
5900 Haynesworth Ln
Houston, TX 77034-4029

Re: Reporting of Methane Exceedance
Greenbelt Landfill
Permit No. MSW 1586
Harris County, Texas

To whom it may concern:

The following notification of methane exceedance is being provided to you in accordance with the approved Landfill Gas Management Plan for the above-referenced facility and as required by applicable regulation (30 TAC §330.371). **This correspondence is provided for notification purposes only and no response is required.** Specifically, you are being notified because you are a public entity or official listed in the permit, or you are listed as an owner of a property within 1,000 feet of the observed exceedance.

During a regularly scheduled methane monitoring event performed on February 21, 2023, methane was detected at 58.3 volume percent in gas monitoring probe GP-10A. This value is in excess of the regulatory limit of 5 volume percent as specified in 30 TAC §330.371(a)(2). No other probes were noted to be out of compliance.

Implementation of the contingency plan in accordance with the facility's permit was initiated, starting with notification of necessary parties. Additionally, in accordance with applicable regulation, remediation efforts are currently underway, and a remediation plan documenting the nature and extent of the exceedance and the proposed remedy will be submitted to the Texas Commission on Environmental Quality within the prescribed timeframe.

If you have any questions or require any additional information, please do not hesitate to contact me at (936) 568-9451.

Sincerely,
Hydrex Environmental

Leonell N. Scarborough, P.G.
Senior Hydrogeologist

1120 NW Stallings Drive
Nacogdoches, TX 75964-3428
printed on recycled paper
936-568-9451
Fax 936-568-9527

Hydrex
ENVIRONMENTAL

February 22, 2023

Salvador Alvarez
4310 Blind River St
Pasadena, TX 77504-3118

Re: Reporting of Methane Exceedance
Greenbelt Landfill
Permit No. MSW 1586
Harris County, Texas

To whom it may concern:

The following notification of methane exceedance is being provided to you in accordance with the approved Landfill Gas Management Plan for the above-referenced facility and as required by applicable regulation (30 TAC §330.371). **This correspondence is provided for notification purposes only and no response is required.** Specifically, you are being notified because you are a public entity or official listed in the permit, or you are listed as an owner of a property within 1,000 feet of the observed exceedance.

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1120 NW Stallings Drive
Nacogdoches, TX 75964-3428
printed on recycled paper
936-568-9451
Fax 936-568-9527

Hydrex
ENVIRONMENTAL

February 22, 2023

Charles Baker
6210 Sands Dr
Pasadena, TX 77505-3863

Re: Reporting of Methane Exceedance
Greenbelt Landfill
Permit No. MSW 1586
Harris County, Texas

To whom it may concern:

The following notification of methane exceedance is being provided to you in accordance with the approved Landfill Gas Management Plan for the above-referenced facility and as required by applicable regulation (30 TAC §330.371). **This correspondence is provided for notification purposes only and no response is required.** Specifically, you are being notified because you are a public entity or official listed in the permit, or you are listed as an owner of a property within 1,000 feet of the observed exceedance.

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Sincerely,
Hydrex Environmental

Leonell N. Scarborough, P.G.
Senior Hydrogeologist

1120 NW Stallings Drive
Nacogdoches, TX 75964-3428
printed on recycled paper
936-568-9451
Fax 936-568-9527

Hydrex ENVIRONMENTAL

February 22, 2023

Arturo & Reyna Resendez
3304 Dartmouth Dr
Pasadena, TX 77503-1441

Re: Reporting of Methane Exceedance
Greenbelt Landfill
Permit No. MSW 1586
Harris County, Texas

To whom it may concern:

To whom it may concern:

The following notification of methane exceedance is being provided to you in accordance with the approved Landfill Gas Management Plan for the above-referenced facility and as required by applicable regulation (30 TAC §330.371). **This correspondence is provided for notification purposes only and no response is required.** Specifically, you are being notified because you are a public entity or official listed in the permit, or you are listed as an owner of a property within 1,000 feet of the observed exceedance.

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Leonell N. Scarborough, P.G.
Senior Hydrogeologist

1120 NW Stallings Drive
Nacogdoches, TX 75964-3428
printed on recycled paper
936-568-9451
Fax 936-568-9527

Appendix C

Greenbelt Landfill
Summary of Daily Monitoring Data (Volume % Methane)

GP-10A

Date	2/21/2023*	2/22/2023	2/23/2023	2/24/2023	2/25/2023	2/27/2023	2/28/2023
% Methane	58.3%	31.70%	39.60%	24.40%	15.70%	71.30%	31.20%
Technician	Lucas Khan	Lucas Khan	Lucas Khan	Lucas Khan	Uziel Rendon	Lucas Khan	Lucas Khan

* Quarterly Event
ND - Non-Detect

Greenbelt Landfill
STRUCTURE MONITORING

Structure 1

Date	2/23/2023	2/28/2023
% Methane	ND	ND
Technician	Lucas Khan	Lucas Khan

Structure 2

Date	2/23/2023	2/28/2023
% Methane	ND	ND
Technician	Lucas Khan	Lucas Khan

Structure 3

Date	2/23/2023	2/28/2023
% Methane	Not Accessible	Not Measured
Technician	Lucas Khan	Lucas Khan

Structure 4

Date	2/23/2023	2/28/2023
% Methane	ND	ND
Technician	Lucas Khan	Lucas Khan

Structure 5

Date	2/23/2023	2/28/2023
% Methane	No Answer	Not Measured
Technician	Lucas Khan	Lucas Khan


Property Owners
ALVAREZ SALVADOR
BAKER CHARLES
FREEDOM FUEL OPERATING LLC
J KRU LAND SERVICES LLC
LUBRIZOL CORPORATION
NOVUS SYSTEMS INC
RESENDEZ ARTURO & REYNA
WASTE CORP TEXAS INC TAX DEPT
Haymesworth Ln
Pizzitola St.
Dabbieri Gardens Dr.
LEGEND
GP-10A
GP-10A 1000 ft Radius
LANDFILL PERMIT BOUNDARY
PARCEL BOUNDARY
N
0
400
800
1,200
SCALE IN FEET
PREPARED FOR:
GFL
DRAWING TITLE:
Property Owners
within
1,000 ft Radius of GP-10A
PREPARED BY:
Hydrex
ENVIRONMENTAL
PROJECT SITE:
GREENBELT LANDFILL
PERMIT NO. 1586A
HARRIS COUNTY, TEXAS
TBPG FIRM NO. 50027
MAP DATE:
02/28/2023
GIS ANALYST:
CLE
PROJECT NO.
L-05-1378
DRAWING NO.
N/A

Structures 1 and 2	
Date	% Methane
2/23/2023	ND
2/28/2023	ND

Structure 3	
Date	Notes
2/23/2023	Not Accessible

Structure 5	
Date	Notes
2/23/2023	No Answer From Resident

Structure 4	
Date	% Methane
2/23/2023	ND
2/28/2023	ND

PREPARED FOR: GFL

DRAWING TITLE: Structure Monitoring within 1,000 ft Radius of GP-10A

PREPARED BY: Hydrex Environmental

PROJECT SITE: GREENBELT LANDFILL
PERMIT NO. 1586A
HARRIS COUNTY, TEXAS

MAP DATE:	GIS ANALYST:	PROJECT NO.	DRAWING NO.
02/28/2023	JLD	L-05-1378	N/A

APPENDIX E

TO-14 Analytical Report

Hydrex Environmental

1120 NW Stallings Drive
Nacogdoches, TX 75964

Greenbelt

Houston, TX

Analytical Report
(0223-1016)

TO-14A

Volatile Organic Compounds

Enthalpy Analytical, LLC

Phone: (281) 984 - 7021 / www.enthalpy.com

931 Seaco Ct. Deer Park, TX 77536-3187

I certify that to the best of my knowledge all analytical data presented in this report:

- Have been checked for completeness
- Are accurate, error-free, and legible
- Have been conducted in accordance with approved protocol, and that all deviations and analytical problems are summarized in the appropriate narrative(s)

This analytical report was prepared in Portable Document Format (.PDF). This report shall not be reproduced except in full without approval of the laboratory. This will provide assurance that parts of a report are not taken out of context.

QA Review Performed by: James Haynes, Quality Assurance Director

Report Issued: 03/01/2023

ENTHALPY ANALYTICAL

Summary of Results

ENTHALPY ANALYTICAL

Enthalpy Analytical

Company: Hydrex Environmental Consulting, LLC

Job No.: 0223-1016-2 EPA Method TO-14A Analysis

Client No.: Hydrex Site: Greenbelt - Houston, TX

Summary

Sample ID	GP10A C70520	
Compound	ppmv	
Methane	808,456	
Ethane	58.9	J
Ethylene	0.129	J
Propane	14.7	
Propylene	0.357	J
Isobutane	1.77	
Butane	4.94	
Acetylene	0.0782	ND
trans-2-Butene	0.0993	J
1-Butene	0.0660	ND
Isobutylene	0.158	J
cis-2-Butene	0.0660	ND
1,3-Butadiene	0.0660	ND

Enthalpy Analytical

Company: Hydrex Environmental Consulting, LLC

Job No.: 0223-1016-1 EPA Method TO-14A Analysis

Client No.: Hydrex Site: Greenbelt - Houston, TX

Summary

Sample ID	GP10A C70520	
Compound	ppbv	
Isopentane	0.141	ND
1-Pentene	0.0344	ND
Pentane	702	
Isoprene	2.35	J
trans-2-Pentene	9.98	
cis-2-Pentene	0.839	
2,2-Dimethylbutane	167	
Cyclopentane	27.7	
2,3-Dimethylbutane	45.0	
2-Methylpentane	103	
3-Methylpentane	161	
1-Hexene	0.860	
Hexane	6.09	
Methylcyclopentane	45.6	
2,4-Dimethylpentane	22.5	
Benzene	8.81	
Cyclohexane	73.0	
2-Methylhexane	8.02	
2,3-Dimethylpentane	35.3	
3-Methylhexane	33.7	
2,2,4-Trimethylpentane	112	
Heptane	1.19	
Methylcyclohexane	71.5	
2,3,4-Trimethylpentane	34.3	
Toluene	43.9	
2-Methylheptane	9.94	
3-Methylheptane	3.63	
n-Octane	0.869	
Ethylbenzene	19.6	
m-Xylene	20.6	
p-Xylene	0.0248	ND
Styrene	126	
o-Xylene	32.7	

Enthalpy Analytical

Company: Hydrex Environmental Consulting, LLC

Job No.: 0223-1016-1 EPA Method TO-14A Analysis

Client No.: Hydrex Site: Greenbelt - Houston, TX

Summary

Sample ID	GP10A C70520
Compound	ppbv
n-Nonane	23.9
Isopropylbenzene	81.5
alpha-Pinene	60.5
n-Propylbenzene	66.1
3-Ethyltoluene	49.4
4-Ethyltoluene	128
1,3,5-Trimethylbenzene	60.3
2-Ethyltoluene	63.0
1,2,4-Trimethylbenzene	167
n-Decane	141
1,2,3-Trimethylbenzene	115
1,3-Diethylbenzene	504
1,4-Diethylbenzene	90.5
n-Undecane	88.6
n-Dodecane	1.29

Results

Enthalpy Analytical

Company: Hydrex Environmental Consulting, LLC

Job No.: 0223-1016-2 EPA Method TO-14A Analysis

Client No.: Hydrex Site: Greenbelt - Houston, TX

Methane

Sample ID	Filename #1	MDL (ppmv)	Ret. Time (min.)	Conc 1 (ppmv)	DF	Final Conc (ppmv)	Flag
GP10A	011F1301.D	0.497	0.64	6,064	133	808,456	

Ethane

Sample ID	Filename #1	MDL (ppmv)	Ret. Time (min.)	Conc 1 (ppmv)	DF	Final Conc (ppmv)	Flag
GP10A	011F1301.D	0.0500	0.80	0.442	133	58.9	J

Ethylene

Sample ID	Filename #1	MDL (ppmv)	Ret. Time (min.)	Conc 1 (ppmv)	DF	Final Conc (ppmv)	Flag
GP10A	010F1201.D	0.0500	1.25	0.0978	1.32	0.129	J

Propane

Sample ID	Filename #1	MDL (ppmv)	Ret. Time (min.)	Conc 1 (ppmv)	DF	Final Conc (ppmv)	Flag
GP10A	010F1201.D	0.0500	1.86	11.2	1.32	14.7	

Propylene

Sample ID	Filename #1	MDL (ppmv)	Ret. Time (min.)	Conc 1 (ppmv)	DF	Final Conc (ppmv)	Flag
GP10A	010F1201.D	0.0500	4.24	0.270	1.32	0.357	J

Isobutane

Sample ID	Filename #1	MDL (ppmv)	Ret. Time (min.)	Conc 1 (ppmv)	DF	Final Conc (ppmv)	Flag
GP10A	010F1201.D	0.0500	4.48	1.34	1.32	1.77	

Enthalpy Analytical

Company: Hydrex Environmental Consulting, LLC

Job No.: 0223-1016-2 EPA Method TO-14A Analysis

Client No.: Hydrex Site: Greenbelt - Houston, TX

Butane

Sample ID	Filename #1	MDL (ppmv)	Ret. Time (min.)	Conc 1 (ppmv)	DF	Final Conc (ppmv)	Flag
GP10A	010F1201.D	0.0500	4.64	3.74	1.32	4.94	

Acetylene

Sample ID	Filename #1	MDL (ppmv)	Ret. Time (min.)	Conc 1 (ppmv)	DF	Final Conc (ppmv)	Flag
GP10A	010F1201.D	0.0592		0.0592	1.32	0.0782	ND

trans-2-Butene

Sample ID	Filename #1	MDL (ppmv)	Ret. Time (min.)	Conc 1 (ppmv)	DF	Final Conc (ppmv)	Flag
GP10A	010F1201.D	0.0500	5.42	0.0752	1.32	0.0993	J

1-Butene

Sample ID	Filename #1	MDL (ppmv)	Ret. Time (min.)	Conc 1 (ppmv)	DF	Final Conc (ppmv)	Flag
GP10A	010F1201.D	0.0500		0.0500	1.32	0.0660	ND

Isobutylene

Sample ID	Filename #1	MDL (ppmv)	Ret. Time (min.)	Conc 1 (ppmv)	DF	Final Conc (ppmv)	Flag
GP10A	010F1201.D	0.0500	5.59	0.120	1.32	0.158	J

cis-2-Butene

Sample ID	Filename #1	MDL (ppmv)	Ret. Time (min.)	Conc 1 (ppmv)	DF	Final Conc (ppmv)	Flag
GP10A	010F1201.D	0.0500		0.0500	1.32	0.0660	ND

Enthalpy Analytical

Company: Hydrex Environmental Consulting, LLC

Job No.: 0223-1016-2 EPA Method TO-14A Analysis

Client No.: Hydrex Site: Greenbelt - Houston, TX

1,3-Butadiene

Sample ID	Filename #1	MDL (ppmv)	Ret. Time (min.)	Conc 1 (ppmv)	DF	Final Conc (ppmv)	Flag
GP10A	010F1201.D	0.0500		0.0500	1.32	0.0660	ND

Enthalpy Analytical

Company: Hydrex Environmental Consulting, LLC

Job No.: 0223-1016-1 EPA Method TO-14A Analysis

Client No.: Hydrex Site: Greenbelt - Houston, TX

Isopentane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_012_001F1201.D	0.0268		0.0268	5.28	0.141	ND

1-Pentene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0261		0.0261	1.32	0.0344	ND

Pentane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_013_001F1301.D	0.0270	12.07	53.2	13.2	702	

Isoprene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_013_001F1301.D	0.0256	12.16	0.178	13.2	2.35	J

trans-2-Pentene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0296	12.34	7.56	1.32	9.98	

cis-2-Pentene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0239	12.51	0.636	1.32	0.839	

Enthalpy Analytical

Company: Hydrex Environmental Consulting, LLC

Job No.: 0223-1016-1 EPA Method TO-14A Analysis

Client No.: Hydrex Site: Greenbelt - Houston, TX

2,2-Dimethylbutane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0254	13.14	127	1.32	167	

Cyclopentane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0240	13.94	21.0	1.32	27.7	

2,3-Dimethylbutane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0256	14.01	34.1	1.32	45.0	

2-Methylpentane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0251	14.14	77.9	1.32	103	

3-Methylpentane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0252	14.53	122	1.32	161	

1-Hexene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0250	14.67	0.652	1.32	0.860	

Enthalpy Analytical

Company: Hydrex Environmental Consulting, LLC

Job No.: 0223-1016-1 EPA Method TO-14A Analysis

Client No.: Hydrex Site: Greenbelt - Houston, TX

Hexane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0255	15.01	4.61	1.32	6.09	

Methylcyclopentane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.02533	15.74	34.6	1.32	45.6	

2,4-Dimethylpentane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0252	15.84	17.1	1.32	22.5	

Benzene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0259	16.37	6.67	1.32	8.81	

Cyclohexane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0248	16.63	55.3	1.32	73.0	

2-Methylhexane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0259	16.82	6.07	1.32	8.02	

Enthalpy Analytical

Company: Hydrex Environmental Consulting, LLC

Job No.: 0223-1016-1 EPA Method TO-14A Analysis

Client No.: Hydrex Site: Greenbelt - Houston, TX

2,3-Dimethylpentane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0247	16.88	26.8	1.32	35.3	

3-Methylhexane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0251	17.04	25.5	1.32	33.7	

2,2,4-Trimethylpentane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0261	17.40	84.8	1.32	112	

Heptane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0256	17.64	0.904	1.32	1.19	

Methylcyclohexane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0254	18.23	54.2	1.32	71.5	

2,3,4-Trimethylpentane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0256	18.93	26.0	1.32	34.3	

Enthalpy Analytical

Company: Hydrex Environmental Consulting, LLC

Job No.: 0223-1016-1 EPA Method TO-14A Analysis

Client No.: Hydrex Site: Greenbelt - Houston, TX

Toluene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0252	19.06	33.2	1.32	43.9	

2-Methylheptane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0255	19.26	7.53	1.32	9.94	

3-Methylheptane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0249	19.44	2.75	1.32	3.63	

n-Octane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0251	20.03	0.658	1.32	0.869	

Ethylbenzene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_012_001F1201.D	0.0244	21.24	3.72	5.28	19.6	

m-Xylene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0172	21.43	15.6	1.32	20.6	

Enthalpy Analytical

Company: Hydrex Environmental Consulting, LLC

Job No.: 0223-1016-1 EPA Method TO-14A Analysis

Client No.: Hydrex Site: Greenbelt - Houston, TX

p-Xylene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0188		0.0188	1.32	0.0248	ND

Styrene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0257	21.83	95.4	1.32	126	

o-Xylene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0245	21.91	24.8	1.32	32.7	

n-Nonane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.02495	22.17	18.1	1.32	23.9	

Isopropylbenzene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0248	22.47	61.7	1.32	81.5	

alpha-Pinene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_006_001F0601.D	0.0225	22.81	0.454	133.32	60.5	

Enthalpy Analytical

Company: Hydrex Environmental Consulting, LLC

Job No.: 0223-1016-1 EPA Method TO-14A Analysis

Client No.: Hydrex Site: Greenbelt - Houston, TX

n-Propylbenzene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_006_001F0601.D	0.0250	22.92	0.496	133.32	66.1	

3-Ethyltoluene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_006_001F0601.D	0.0245	23.00	0.371	133.32	49.4	

4-Ethyltoluene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_006_001F0601.D	0.0241	23.02	0.961	133.32	128	

1,3,5-Trimethylbenzene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_006_001F0601.D	0.0243	23.10	0.452	133.32	60.3	

2-Ethyltoluene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_006_001F0601.D	0.0245	23.28	0.473	133.32	63.0	

1,2,4-Trimethylbenzene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_006_001F0601.D	0.0247	23.44	1.26	133.32	167	

Enthalpy Analytical

Company: Hydrex Environmental Consulting, LLC

Job No.: 0223-1016-1 EPA Method TO-14A Analysis

Client No.: Hydrex Site: Greenbelt - Houston, TX

n-Decane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_006_001F0601.D	0.0250	23.55	1.06	133.32	141	

1,2,3-Trimethylbenzene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_006_001F0601.D	0.0236	23.73	0.862	133.32	115	

1,3-Diethylbenzene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_006_001F0601.D	0.0228	24.05	3.78	133.32	504	

1,4-Diethylbenzene

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_006_001F0601.D	0.0249	24.11	0.679	133.32	90.5	

n-Undecane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_006_001F0601.D	0.0251	24.54	0.665	133.32	88.6	

n-Dodecane

Sample ID	Filename #1	MDL (ppb)	Ret. Time (min.)	Conc 1 (ppb)	DF	Final Conc (ppb)	Flag
GP10A	_011_001F1101.D	0.0240	25.31	0.980	1.32	1.29	

Narrative Summary

Enthalpy Analytical Narrative Summary

Company	Hydrex Environmental
Job #	0223-1016 TO-14A
Client #	Greenbelt

Custody	Megan Burt received the sample on 02/27/23 at ambient temperature after being relinquished by Hydrex. The sample was received in good condition. Prior to, during, and after analysis, the sample was kept under lock with access only to authorized personnel by Enthalpy Analytical, LLC.
Analysis	The sample was analyzed for speciated volatile organic compounds (VOCs) using the analytical procedures in EPA Compendium Method TO-14A, Determination of Volatile Organic Compounds (VOCs) In Ambient Air Using Specially Prepared Canisters With Subsequent Analysis By Gas Chromatography. The analytes were all referenced to certified gas phase standards. The calibration verification standard for dodecane was used past its expiration date. GCs #8 and #9 were used for these analyses.
Calibration	The calibration curve(s) used met all required acceptance criteria.
QC Notes	The analytes of interest were not identified at concentrations greater than the detection limit in the analyses of the laboratory blanks with the exception of undecane, which was present below the reporting limit. The duplicate analyzed with each batch met the % difference criteria. The duplicate on GC #9 was analyzed on the CCV for the batch rather than a sample. The calibration verifications and laboratory control sample for dodecane each failed high at roughly 160-190% (vs acceptance limits of 70-130%), indicating a likely high bias in the reported dodecane results.
Reporting Notes	Interferences and minor retention time shifts were observed in the chromatography, likely due to the high methane concentration present in the sample and/or due to other non-target compounds. Several targets are reported from dilution analyses where appropriate to minimize interferences. These analyses met the requirements of the TNI Standard. Any deviations from the requirements of the reference method or TNI Standard have been stated above. The results presented in this report are representative of the sample as provided to the laboratory.

ENTHALPY ANALYTICAL

General Reporting Notes

The following are general reporting notes that are applicable to all Enthalpy Analytical, LLC data reports, unless specifically noted otherwise.

- Any analysis which refers to the method as ***"Type"*** represents a planned deviation from the reference method. For instance a Hydrogen Sulfide assay from a Tedlar bag would be labeled as "EPA Method 16-Type" because Tedlar bags are not mentioned as one of the collection options in EPA Method 16.

- The acronym ***MDL*** represents the Minimum Detection Limit. Below this value the laboratory cannot determine the presence of the analyte of interest reliably.

- The acronym ***LOQ*** represents the Limit of Quantification. Below this value the laboratory cannot quantitate the analyte of interest within the criteria of the method.

- The acronym ***ND*** following a value indicates a non-detect or analytical result below the MDL.

- The letter ***J*** in the Qualifier or Flag column in the results indicates that the value is between the MDL and the LOQ. The laboratory can positively identify the analyte of interest as present, but the value should be considered an estimate.

- The letter ***E*** in the Qualifier or Flag column indicates an analytical result exceeding 100% of the highest calibration point. The associated value should be considered as an estimate.

- Sample results are presented 'as measured' for single injection methodologies, or an average value if multiple injections are made. If all injections are below the MDL, the sample is considered non-detect and the ND value is presented. If one, but not all, are below the MDL, the MDL value is used for any injections that are below the MDL. For example, if the MDL is 0.500 and LOQ is 1.00, and the instrument measures 0.355, 0.620, and 0.442 - the result reported is the average of 0.500, 0.620, and 0.500 - - - i.e. 0.540 with a J flag.

- When a spike recovery (Bag Spike, Collocated Spike Train, or liquid matrix spike) is being calculated, the native (unspiked) sample result is used in the calculations, as long as the value is above the MDL. If a sample is ND, then 0 is used as the native amount (not the MDL value).

- The acronym ***DF*** represents Dilution Factor. This number represents dilution of the sample during the preparation and/or analysis process. The analytical result taken from a laboratory instrument is multiplied by the DF to determine the final undiluted sample results.

- The addition of ***MS*** to the Sample ID represents a Matrix Spike. An aliquot of an actual sample is spiked with a known amount of analyte so that a percent recovery value can be determined. The MS analysis indicates what effect the sample matrix may have on the target analyte, i.e. whether or not anything in the sample matrix interferes with the analysis of the analyte(s).

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ANALYTICAL

General Reporting Notes
(continued)

- The addition of ***MSD*** to the Sample ID represents a Matrix Spike Duplicate. Prepared in the same manner as a MS, the use of duplicate matrix spikes allows further confirmation of laboratory quality by showing the consistency of results gained by performing the same steps multiple times.

- The addition of ***LD*** to the Sample ID represents a Laboratory Duplicate. The analyst prepares an additional aliquot of sample for testing and the results of the duplicate analysis are compared to the initial result. The result should have a difference value of within 10% of the initial result (if the results of the original analysis are greater than the LOQ).

- The addition of ***AD*** to the Sample ID represents an Alternate Dilution. The analyst prepares an additional aliquot at a different dilution factor (usually double the initial factor). This analysis helps confirm that no additional compound is present and coeluting or sharing absorbance with the analyte of interest, as they would have a different response/absorbance than the analyte of interest.

- The Sample ID ***LCS*** represents a Laboratory Control Sample. Clean matrix, similar to the client sample matrix, prepared and analyzed by the laboratory using the same reagents, spiking standards and procedures used for the client samples. The LCS is used to assess the control of the laboratory's analytical system. Whenever spikes are prepared for our client projects, two spikes are retained as LCSs. The LCSs are labeled with the associated project number and kept in-house at the appropriate temperature conditions. When the project samples are received for analysis, the LCSs are analyzed to confirm that the analyte could be recovered from the media, separate from the samples which were used on the project and which may have been affected by source matrix, sample collection, and/or sample transport.

- **Significant Figures**: Where the reported value is much greater than unity (1.00) in the units expressed, the number is rounded to a whole number of units, rather than to 3 significant figures. For example, a value of 10,456.45 ug catch is rounded to 10,456 ug. There are five significant digits displayed, but no confidence should be placed on more than two significant digits. In the case of small numbers, generally 3 significant figures are presented, but still only 2 should be used with confidence. Many neat materials are only certified to 3 digits, and as the mathematically correct final result is always 1 digit less than all its pre-cursors - 2 significant figures are what are most defensible.

- **Manual Integration**: The data systems used for processing will flag manually integrated peaks with an "M". There are several reasons a peak may be manually integrated. These reasons will be identified by the following two letter designations on sample chromatograms, if provided in the report. The peak was ***not integrated*** by the software **"NI"**, the peak was ***integrated incorrectly*** by the software **"II"** or the ***wrong peak*** was integrated by the software **"WP"**. These codes will accompany the analyst's manual integration stamp placed next to the compound name on the chromatogram.

ENTHALPY ANALYTICAL

Sample Custody

0223-1016-100088

Chain of Custody Record

ENTHALPY ANALYTICAL

Page____of____

Special Handling:
- ☐ Standard Turn Around Time (10 business days)
- ☐ Rush Turn Around Time – Date Needed: 2 days
- All TATs Subject to Approval by Enthalpy Analytical, Inc.
- All Bag/Can Samples Disposed of 1 Month from Receipt.
- All Other Samples Disposed of 4 Months from Receipt.

Client Name: Hydrex
Project Manager: Jordan DiMezzo
Report To: Jordan DiMezzo

Project Number:
Site Name: Greenbelt
Location: Houston

PO#:
Telephone#: 936-569-9451
Email: [redacted]

For spiked or duplicate samples: please provide sample volumes for recovery calculations.
For Particulates: please provide tare weights and/or condensed water volumes.

Special Instructions:

A=Air 1=H2SO4 2=NaOH W=Water O=Other
X=XAD C=Charcoal SG=Silica Gel
G=Grab C=Composite Q=Quality Control O=Other

Sample ID	Date	Time	Sample Volume	Type	Matrix	Sample Containers: # of VOA Vials	# of Glass	# of Plastic	# of Bags	# of Canisters	# of Tubes	# Other	Analyses: TO-14	Notes:
GP 10A	2-27-23	2:30	6L	A						1			✓	#C70520
TIFC														

Feb 27'23 PM 3:09

Relinquished By:	Date:	Received By:	Date:	Time:	Sample Condition Upon Receipt:
Lucas Kahn	2-27-23		2/27		☐ Iced ☐ Ambient ☑ °C 28.2 Luke gun
					☐ Iced ☐ Ambient ☐ °C_____
					☐ Iced ☐ Ambient ☐ °C_____

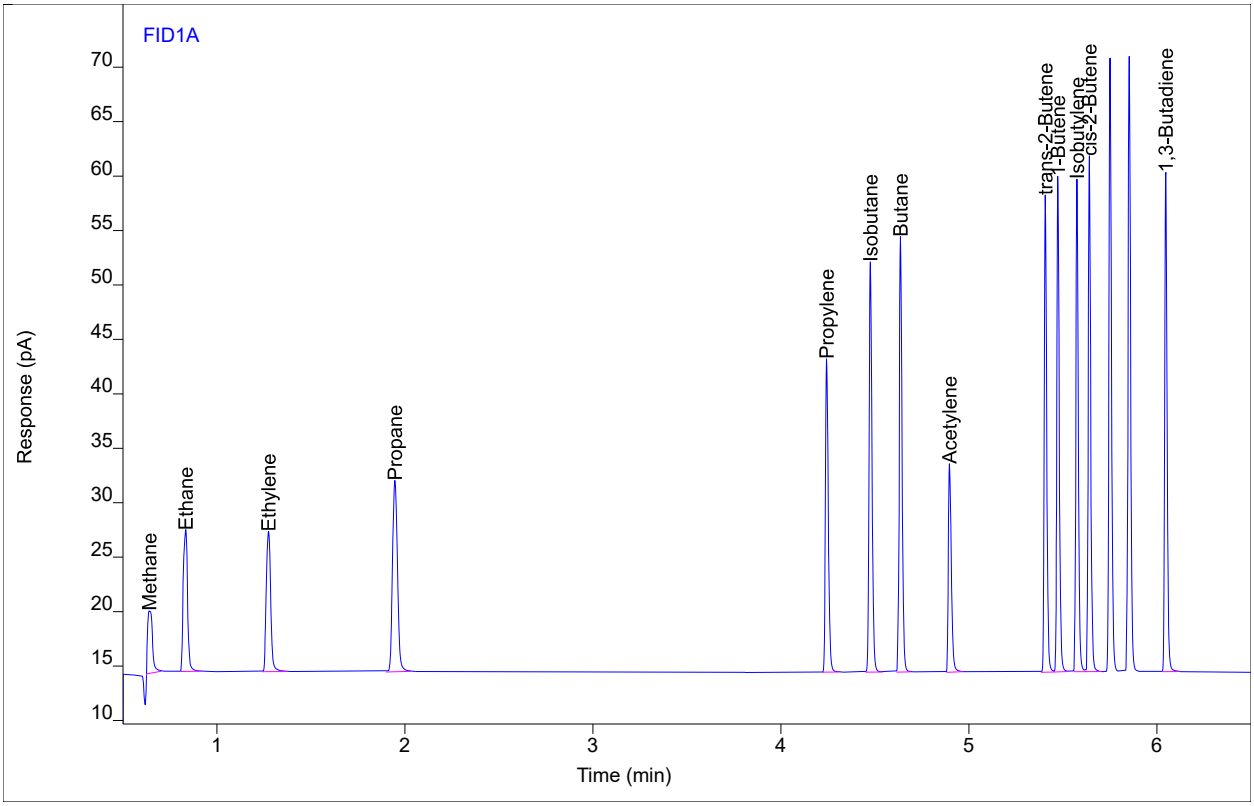
Raw Data

Chromatogram Report

Sample Name	Prep1p340 #C6 ENV(1=0,4=495)
Sequence Name	DPGC8-022823 ver.5
Inj Data File	015F0101.D
File Location	3 - Houston Lab/Data/GC8/2023_Q1
Injection Date	2/28/2023 9:41 AM
File Modified	3/1/2023 9:26 AM
Instrument	DP-GC08
Operator	Kristopher Beverly

Enthalpy Analytical

Sample Type	Sample
Vial Number	15
Injection Volume	250
Injection	1 of 1
Acquisition Method	DPGC8-ACQ-083122.M
Analysis Method	DPGC8-F_010323_TO14A.M
Method Modified	1/23/2023 10:36 AM
Printed	3/1/2023 10:41 AM



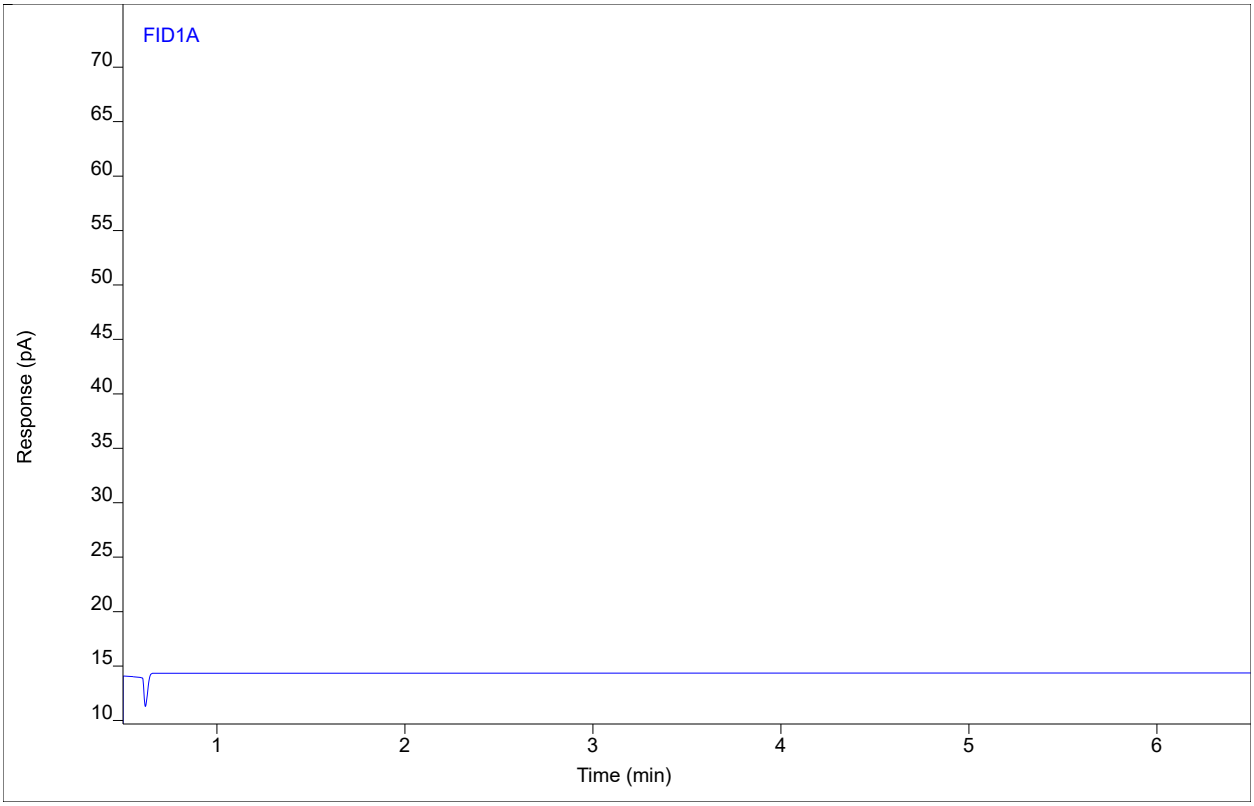
Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
Methane	PB	0.64	10.3619	5.77232	10.0632	1	10.0632	ppm
Ethane	BB	0.83	20.6070	13.0508	10.7477	1	10.7477	ppm
Ethylene	BB	1.28	20.9719	12.8842	10.6340	1	10.6340	ppm
Propane	BB	1.95	32.1410	17.5804	11.1228	1	11.1228	ppm
Propylene	BB	4.24	30.5303	28.8669	10.6512	1	10.6512	ppm
Isobutane	BB	4.48	40.9484	37.6902	10.8298	1	10.8298	ppm
Butane	BB	4.64	41.3016	40.0010	10.7265	1	10.7265	ppm
Acetylene	BB	4.90	20.8436	19.1713	10.6936	1	10.6936	ppm
trans-2-Butene	BV	5.41	39.1000	43.9997	10.5391	1	10.5391	ppm
1-Butene	VB	5.47	40.3754	45.9600	10.6516	1	10.6516	ppm
Isobutylene	BV	5.58	40.1190	45.3285	10.7515	1	10.7515	ppm
cis-2-Butene	VB	5.64	41.4855	47.4242	10.8381	1	10.8381	ppm
1,3-Butadiene	BB	6.05	39.9040	46.2272	10.7430	1	10.7430	ppm

Chromatogram Report

Enthalpy Analytical

Sample Name	N2 #MB Humid
Sequence Name	DPGC8-022823 ver.5
Inj Data File	001F0301.D
File Location	3 - Houston Lab/Data/GC8/2023_Q1
Injection Date	2/28/2023 10:29 AM
File Modified	3/1/2023 10:28 AM
Instrument	DP-GC08
Operator	Emily Decker

Sample Type	Sample
Vial Number	1
Injection Volume	250
Injection	1 of 1
Acquisition Method	DPGC8-ACQ-083122.M
Analysis Method	DPGC8-F_010323_TO14A.M
Method Modified	1/23/2023 10:36 AM
Printed	3/1/2023 10:41 AM



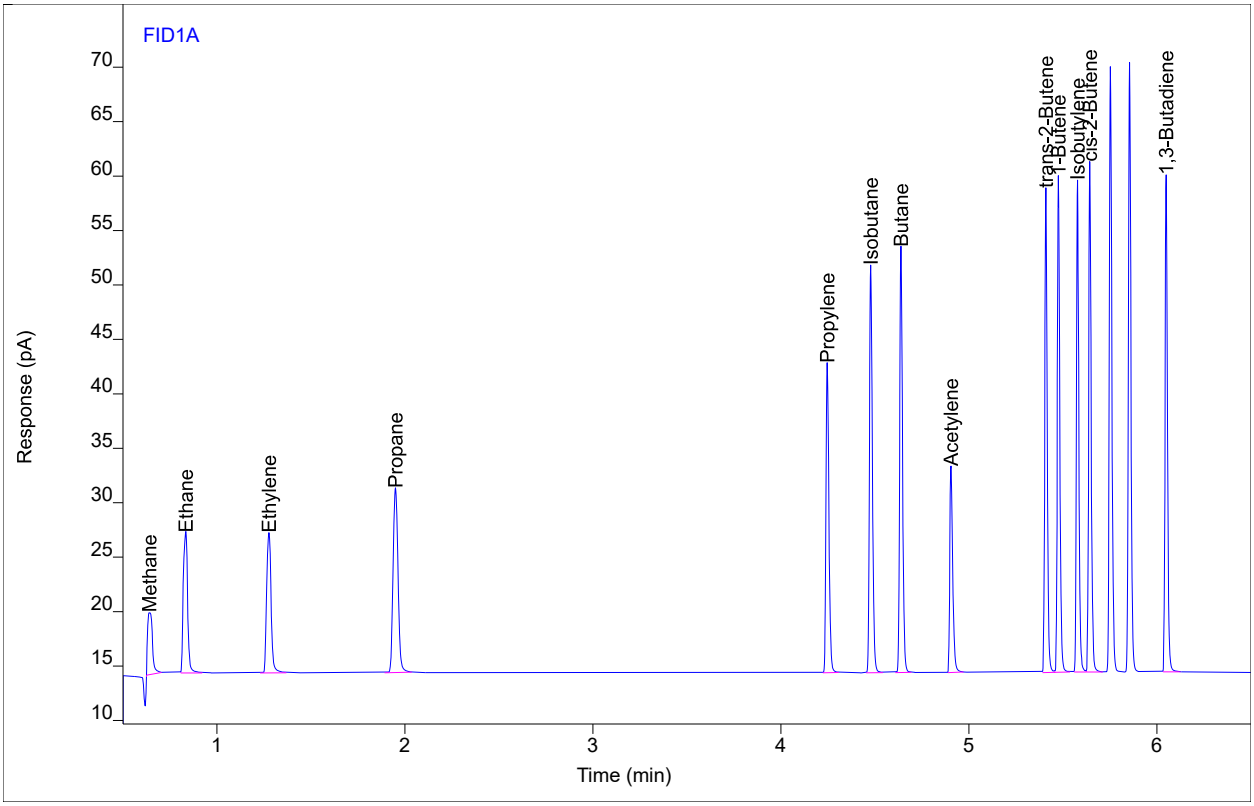
Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
Methane		(0.64)				1		ppm
Ethane		(0.84)				1		ppm
Ethylene		(1.29)				1		ppm
Propane		(1.98)				1		ppm
Propylene		(4.28)				1		ppm
Isobutane		(4.51)				1		ppm
Butane		(4.67)				1		ppm
Acetylene		(4.94)				1		ppm
trans-2-Butene		(5.43)				1		ppm
1-Butene		(5.50)				1		ppm
Isobutylene		(5.60)				1		ppm
cis-2-Butene		(5.66)				1		ppm
1,3-Butadiene		(6.07)				1		ppm

Chromatogram Report

Sample Name	Prep1p340 #C6 LCS
Sequence Name	DPGC8-022823 ver.5
Inj Data File	002F0401.D
File Location	3 - Houston Lab/Data/GC8/2023_Q1
Injection Date	2/28/2023 10:47 AM
File Modified	3/1/2023 9:27 AM
Instrument	DP-GC08
Operator	Emily Decker

Enthalpy Analytical

Sample Type	Sample
Vial Number	2
Injection Volume	250
Injection	1 of 1
Acquisition Method	DPGC8-ACQ-083122.M
Analysis Method	DPGC8-F_010323_TO14A.M
Method Modified	1/23/2023 10:36 AM
Printed	3/1/2023 10:41 AM



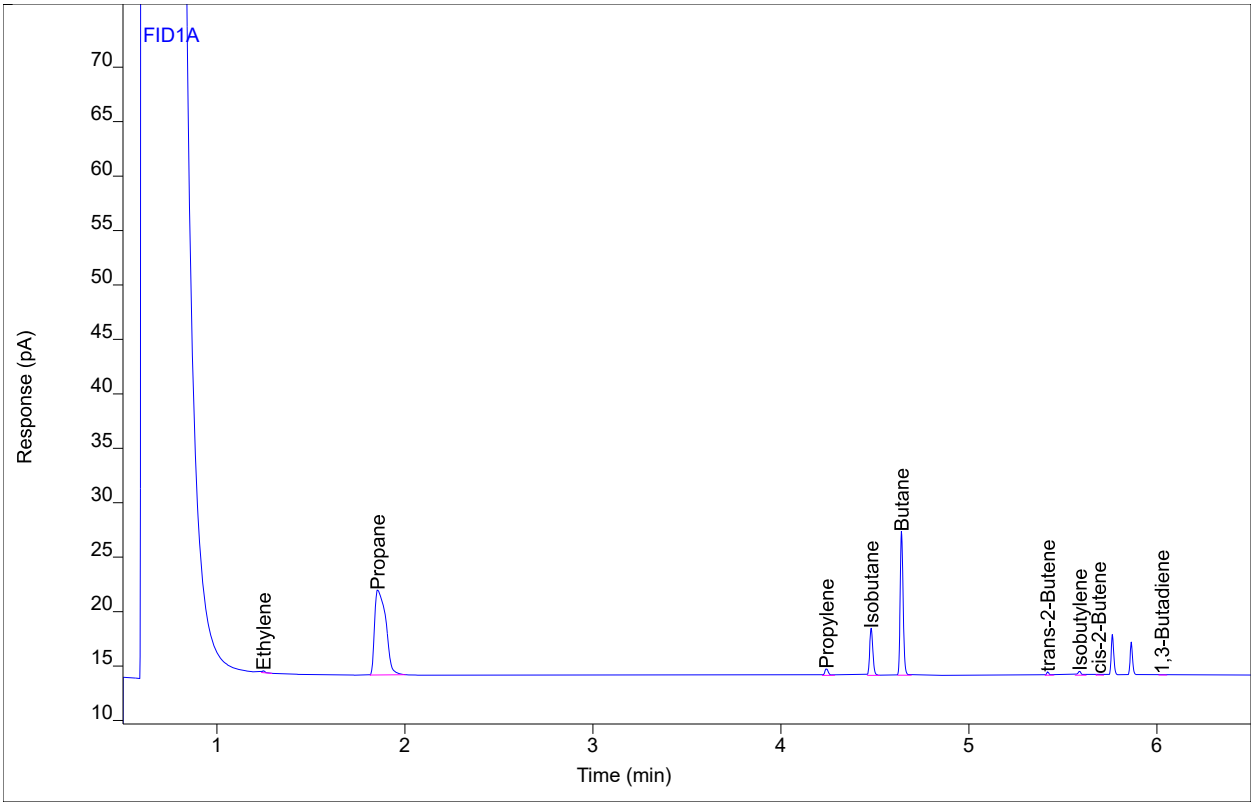
Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
Methane	PB	0.64	10.2990	5.74781	10.0020	1	10.0020	ppm
Ethane	BB	0.83	20.6311	12.9925	10.7602	1	10.7602	ppm
Ethylene	VB	1.28	20.9901	12.8911	10.6433	1	10.6433	ppm
Propane	BB	1.95	30.8525	16.9623	10.6769	1	10.6769	ppm
Propylene	VB	4.25	30.3700	28.5122	10.5953	1	10.5953	ppm
Isobutane	BB	4.48	40.8631	37.4471	10.8073	1	10.8073	ppm
Butane	BB	4.64	40.9340	39.4182	10.6310	1	10.6310	ppm
Acetylene	BB	4.90	20.6962	18.9885	10.6180	1	10.6180	ppm
trans-2-Butene	BV	5.41	38.9352	44.5137	10.4947	1	10.4947	ppm
1-Butene	VB	5.48	40.2232	45.6851	10.6115	1	10.6115	ppm
Isobutylene	BV	5.58	39.9485	45.2091	10.7058	1	10.7058	ppm
cis-2-Butene	VB	5.64	41.3381	46.9815	10.7995	1	10.7995	ppm
1,3-Butadiene	BB	6.05	39.7204	45.7180	10.6936	1	10.6936	ppm

Chromatogram Report

Enthalpy Analytical

Sample Name	0223-1016.GP10A C70520.Bag
Sequence Name	DPGC8-022823 ver.5
Inj Data File	010F1201.D
File Location	3 - Houston Lab/Data/GC8/2023_Q1
Injection Date	2/28/2023 1:53 PM
File Modified	3/1/2023 10:39 AM
Instrument	DP-GC08
Operator	Kristopher Beverly

Sample Type	Sample
Vial Number	10
Injection Volume	250
Injection	1 of 1
Acquisition Method	DPGC8-ACQ-083122.M
Analysis Method	DPGC8-F_010323_TO14A.M
Method Modified	3/1/2023 10:39 AM
Printed	3/1/2023 10:41 AM



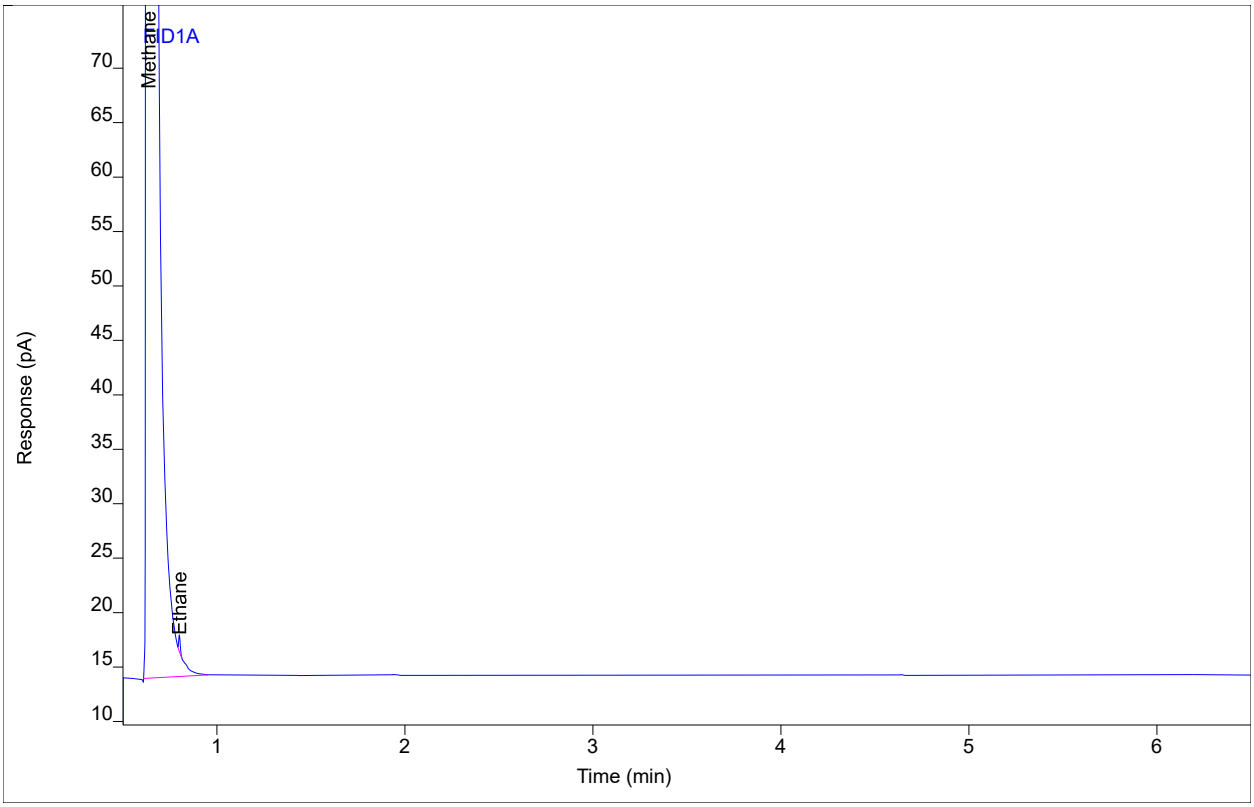
Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
Ethylene	BB	1.25	0.19288	0.23793	0.09780	1.32	0.12910	ppm
Propane	BB	1.86	32.2812	7.82271	11.1713	1.32	14.7461	ppm
Propylene	BB	4.24	0.77456	0.62390	0.27022	1.32	0.35670	ppm
Isobutane	BB	4.48	5.05715	4.33805	1.33749	1.32	1.76548	ppm
Butane	BB	4.64	14.4055	13.2711	3.74126	1.32	4.93847	ppm
Acetylene		(4.94)				1.32		ppm
trans-2-Butene	BB	5.42	0.27911	0.32034	0.07523	1.32	0.09931	ppm
1-Butene		(5.50)				1.32		ppm
Isobutylene	BB	5.59	0.44736	0.39820	0.11989	1.32	0.15825	ppm
cis-2-Butene	BB	5.69	0.11730	0.13182	0.03064	1.32	0.04045	ppm
1,3-Butadiene	BB	6.03	0.07460	0.07890	0.02008	1.32	0.02651	ppm

Chromatogram Report

Sample Name	0223-1016.GP10A C70520.Bag
Sequence Name	DPGC8-022823 ver.5
Inj Data File	011F1301.D
File Location	3 - Houston Lab/Data/GC8/2023_Q1
Injection Date	2/28/2023 2:18 PM
File Modified	3/1/2023 9:27 AM
Instrument	DP-GC08
Operator	Kristopher Beverly

Enthalpy Analytical

Sample Type	Sample
Vial Number	11
Injection Volume	250
Injection	1 of 1
Acquisition Method	DPGC8-ACQ-083122.M
Analysis Method	DPGC8-F_010323_TO14A.M
Method Modified	1/23/2023 10:36 AM
Printed	3/1/2023 10:41 AM



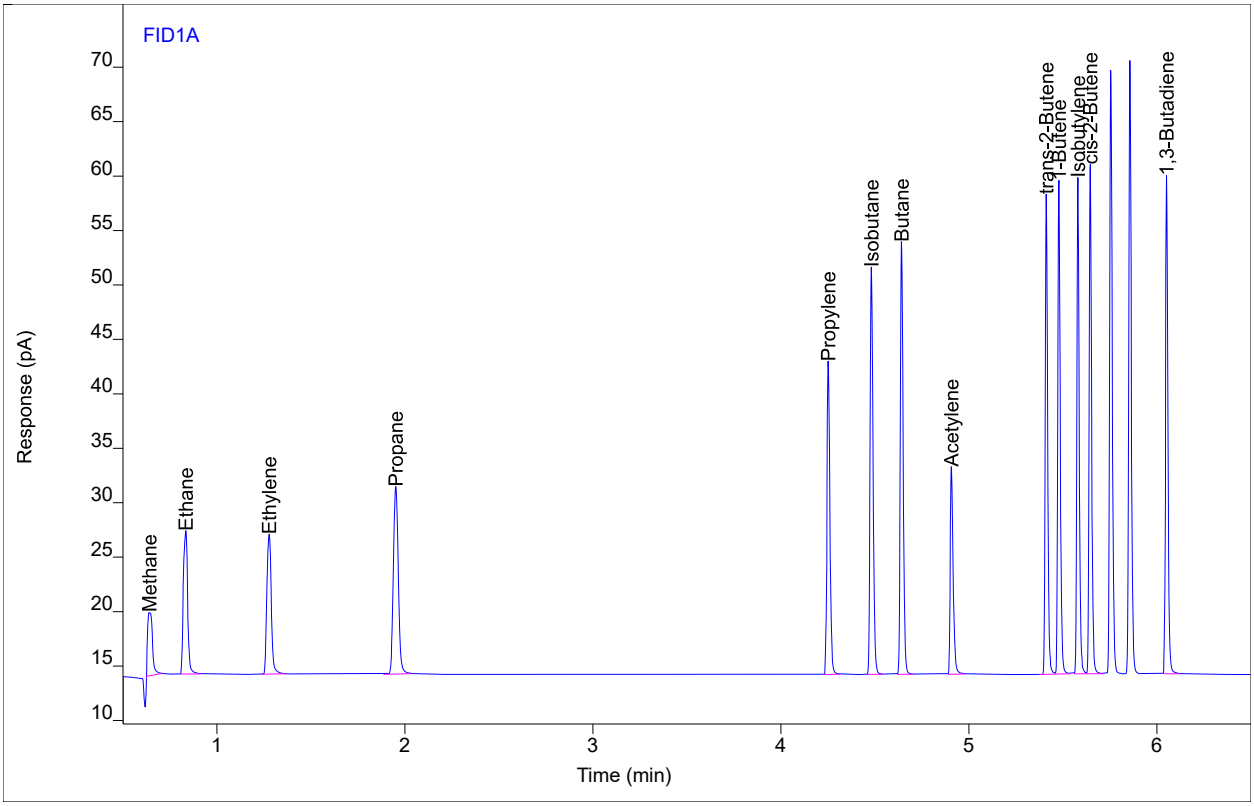
Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
Methane	PM R	0.64	6244.05	3350.58	6064.03	133.32	808456	ppm
Ethane	MI "II" KAB MM T	0.80	0.84698	1.65148	0.44174	133.32	58.8934	ppm

Chromatogram Report

Enthalpy Analytical

Sample Name	Prep1p340 #C6 ENV(1=0,4=495)
Sequence Name	DPGC8-022823 ver.5
Inj Data File	015F1501.D
File Location	3 - Houston Lab/Data/GC8/2023_Q1
Injection Date	2/28/2023 2:56 PM
File Modified	3/1/2023 9:45 AM
Instrument	DP-GC08
Operator	Kristopher Beverly

Sample Type	Sample
Vial Number	15
Injection Volume	250
Injection	1 of 1
Acquisition Method	DPGC8-ACQ-083122.M
Analysis Method	DPGC8-F_010323_TO14A.M
Method Modified	1/23/2023 10:36 AM
Printed	3/1/2023 10:41 AM



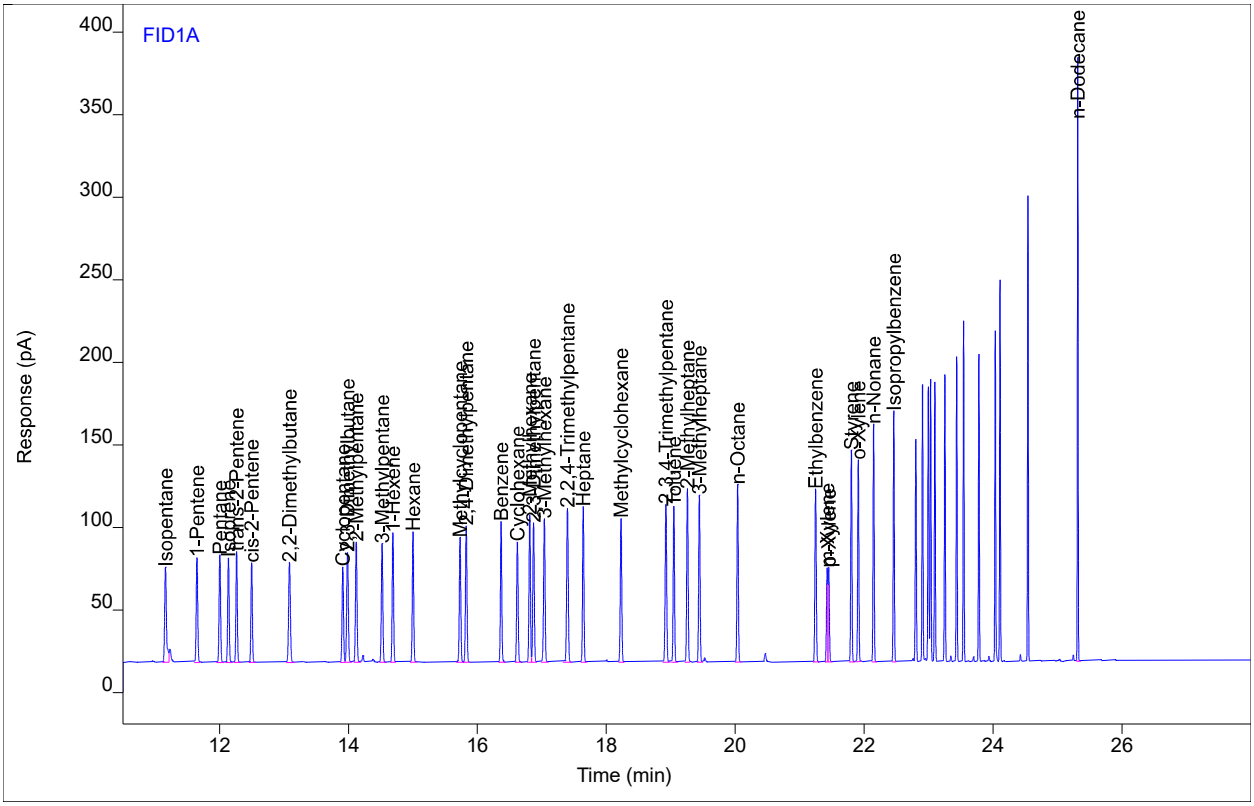
Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
Methane	PB	0.64	10.5302	5.86738	10.2266	1	10.2266	ppm
Ethane	BV	0.83	20.7883	13.1581	10.8422	1	10.8422	ppm
Ethylene	VB	1.28	20.8601	12.8506	10.5773	1	10.5773	ppm
Propane	BB	1.95	31.2046	17.2192	10.7987	1	10.7987	ppm
Propylene	BB	4.25	30.4722	28.8963	10.6310	1	10.6310	ppm
Isobutane	BB	4.48	40.9210	37.4402	10.8226	1	10.8226	ppm
Butane	BB	4.64	41.5593	40.0418	10.7934	1	10.7934	ppm
Acetylene	BB	4.91	20.6092	19.0946	10.5734	1	10.5734	ppm
trans-2-Butene	BV	5.41	39.0347	44.3028	10.5215	1	10.5215	ppm
1-Butene	VB	5.48	40.3039	45.6855	10.6327	1	10.6327	ppm
Isobutylene	BV	5.58	40.0950	45.6423	10.7451	1	10.7451	ppm
cis-2-Butene	VB	5.65	41.4802	47.0461	10.8367	1	10.8367	ppm
1,3-Butadiene	BB	6.05	39.7900	45.8508	10.7123	1	10.7123	ppm

Chromatogram Report

Enthalpy Analytical

Sample Name	Prep1p231 #P7
Sequence Name	DPGC9-022723 ver.2
Inj Data File	_001_015F0101.D
File Location	3 - Houston Lab/Data/GC9/2023_Q1
Injection Date	2/27/2023 9:34 AM
File Modified	3/1/2023 10:35 AM
Instrument	DP-GC09
Operator	Katrina Krch

Sample Type	Sample
Vial Number	Vial 15
Injection Volume	NA
Injection	1 of 1
Acquisition Method	DPGC9-ACQ_122822A.M
Analysis Method	DPGC9-F_122822-LIMS.M
Method Modified	3/1/2023 9:02 AM
Printed	3/1/2023 2:39 PM



Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
Isopentane	BV	11.16	113.458	57.8139	18.8183	1	18.8183	ppb
1-Pentene	BV	11.65	101.118	63.6374	16.9371	1	16.9371	ppb
Pentane	VB	12.00	103.626	65.2834	17.2906	1	17.2906	ppb
Isoprene	BB	12.14	99.6736	63.6335	16.7149	1	16.7149	ppb
trans-2-Pentene	BB	12.27	99.2701	67.3245	16.6860	1	16.6860	ppb
cis-2-Pentene	VB	12.50	92.0887	60.4887	15.5072	1	15.5072	ppb
2,2-Dimethylbutane	BB	13.09	115.516	60.6967	16.3619	1	16.3619	ppb
Cyclopentane	BV	13.91	92.1094	58.2199	15.5052	1	15.5052	ppb
2,3-Dimethylbutane	VB	13.99	117.504	66.9867	16.5048	1	16.5048	ppb
2-Methylpentane	VB	14.12	120.041	73.1705	16.8176	1	16.8176	ppb
3-Methylpentane	BB	14.52	115.597	71.9591	16.3170	1	16.3170	ppb
1-Hexene	BB	14.69	115.636	78.5168	16.3044	1	16.3044	ppb
Hexane	BB	15.00	117.197	79.3353	16.6266	1	16.6266	ppb
Methylcyclopentane	BV	15.73	118.391	75.5512	16.5960	1	16.5960	ppb
2,4-Dimethylpentane	VB	15.83	134.575	82.8894	16.3789	1	16.3789	ppb
Benzene	BB	16.37	122.250	85.4700	17.8299	1	17.8299	ppb
Cyclohexane	BB	16.62	115.202	73.1473	16.2406	1	16.2406	ppb
2-Methylhexane	BV	16.81	136.565	89.2920	16.9259	1	16.9259	ppb
2,3-Dimethylpentane	VB	16.87	134.384	84.6436	15.9193	1	15.9193	ppb
3-Methylhexane	BB	17.04	138.018	86.9346	16.4560	1	16.4560	ppb

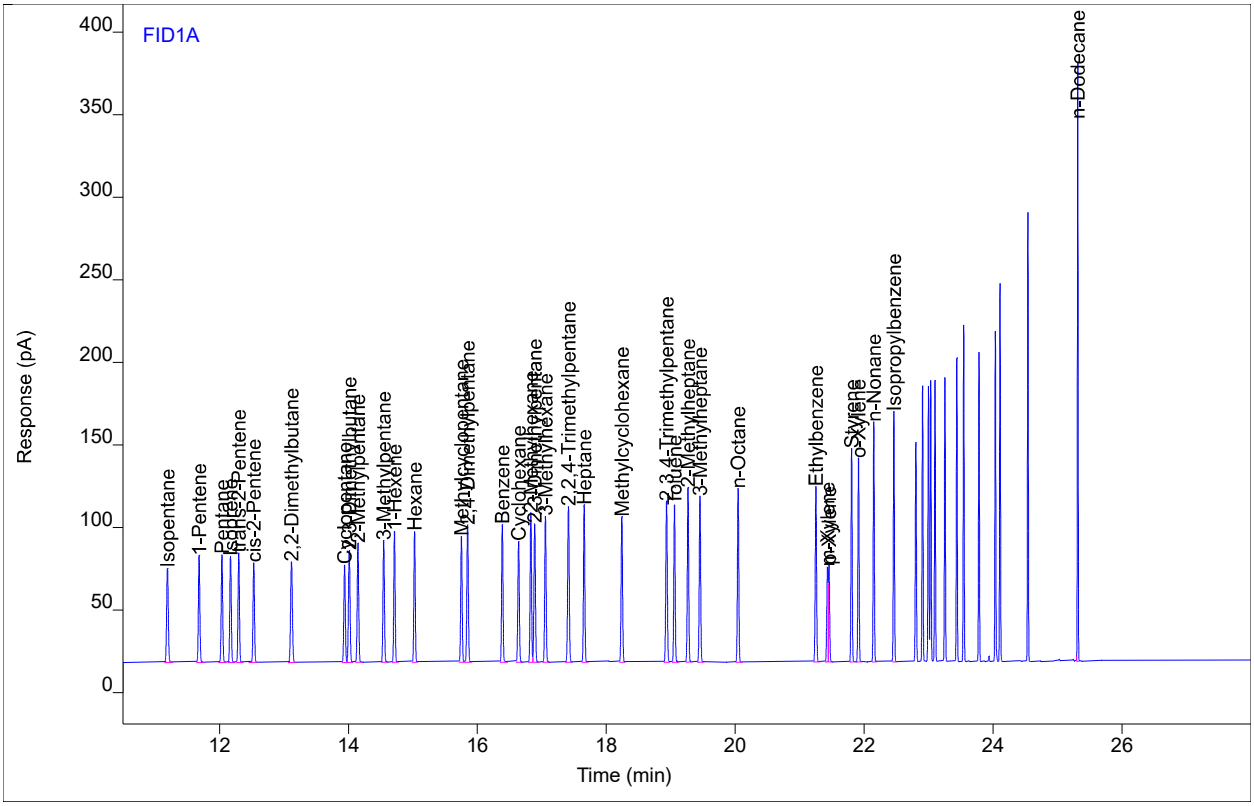
Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
2,2,4-Trimethylpentane	VB	17.40	158.413	93.5308	16.9941	1	16.9941	ppb
Heptane	BB	17.64	136.905	94.2321	16.9374	1	16.9374	ppb
Methylcyclohexane	BB	18.23	136.926	87.3416	16.5996	1	16.5996	ppb
2,3,4-Trimethylpentane	BB	18.93	156.462	95.7408	16.8171	1	16.8171	ppb
Toluene	BB	19.05	136.266	94.3786	18.0018	1	18.0018	ppb
2-Methylheptane	BV	19.26	155.162	105.014	17.1388	1	17.1388	ppb
3-Methylheptane	BB	19.44	151.289	101.479	16.6865	1	16.6865	ppb
n-Octane	BB	20.04	153.220	107.659	17.1940	1	17.1940	ppb
Ethylbenzene	BB	21.25	151.764	104.645	18.3963	1	18.3963	ppb
m-Xylene	BV	21.43	79.1344	57.2401	9.72613	1	9.72613	ppb
p-Xylene	VB	21.45	79.9979	57.6274	9.96389	1	9.96389	ppb
Styrene	BB	21.80	166.422	128.390	21.5591	1	21.5591	ppb
o-Xylene	BB	21.91	153.730	122.350	19.3578	1	19.3578	ppb
n-Nonane	BB	22.15	173.234	143.802	18.0178	1	18.0178	ppb
Isopropylbenzene	BB	22.46	175.876	152.446	19.0691	1	19.0691	ppb
n-Dodecane	BB	25.32	301.433	368.019	37.8991	1	37.8991	ppb

Chromatogram Report

Enthalpy Analytical

Sample Name	Prep1p231 #P7 Dup
Sequence Name	DPGC9-022723 ver.2
Inj Data File	_002_015F0201.D
File Location	3 - Houston Lab/Data/GC9/2023_Q1
Injection Date	2/27/2023 10:16 AM
File Modified	3/1/2023 8:55 AM
Instrument	DP-GC09
Operator	Katrina Krch

Sample Type	Sample
Vial Number	Vial 15
Injection Volume	NA
Injection	1 of 1
Acquisition Method	DPGC9-ACQ_122822A.M
Analysis Method	DPGC9-F_122822-LIMS.M
Method Modified	3/1/2023 8:55 AM
Printed	3/1/2023 2:39 PM



Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
Isopentane	BB	11.19	103.887	57.3867	17.2309	1	17.2309	ppb
1-Pentene	BB	11.68	101.496	64.7777	17.0004	1	17.0004	ppb
Pentane	BB	12.04	104.288	65.7454	17.4012	1	17.4012	ppb
Isoprene	BB	12.17	100.608	64.4384	16.8717	1	16.8717	ppb
trans-2-Pentene	BB	12.30	100.003	66.5118	16.8092	1	16.8092	ppb
cis-2-Pentene	BB	12.53	92.8450	60.6664	15.6346	1	15.6346	ppb
2,2-Dimethylbutane	BB	13.12	116.726	61.3043	16.5334	1	16.5334	ppb
Cyclopentane	BV	13.94	93.1471	59.4570	15.6799	1	15.6799	ppb
2,3-Dimethylbutane	VB	14.01	118.764	68.0696	16.6817	1	16.6817	ppb
2-Methylpentane	BB	14.15	116.444	72.3221	16.3137	1	16.3137	ppb
3-Methylpentane	BB	14.55	116.576	73.9693	16.4551	1	16.4551	ppb
1-Hexene	BB	14.71	116.029	79.7073	16.3598	1	16.3598	ppb
Hexane	BB	15.03	117.520	79.6289	16.6724	1	16.6724	ppb
Methylcyclopentane	BB	15.75	118.543	76.5031	16.6173	1	16.6173	ppb
2,4-Dimethylpentane	BB	15.85	135.951	83.4153	16.5462	1	16.5462	ppb
Benzene	BB	16.39	121.795	83.8384	17.7636	1	17.7636	ppb
Cyclohexane	BB	16.64	115.683	73.4378	16.3084	1	16.3084	ppb
2-Methylhexane	BV	16.83	137.382	90.7196	17.0271	1	17.0271	ppb
2,3-Dimethylpentane	VB	16.89	135.932	84.4454	16.1027	1	16.1027	ppb
3-Methylhexane	BB	17.06	135.292	88.7269	16.1310	1	16.1310	ppb

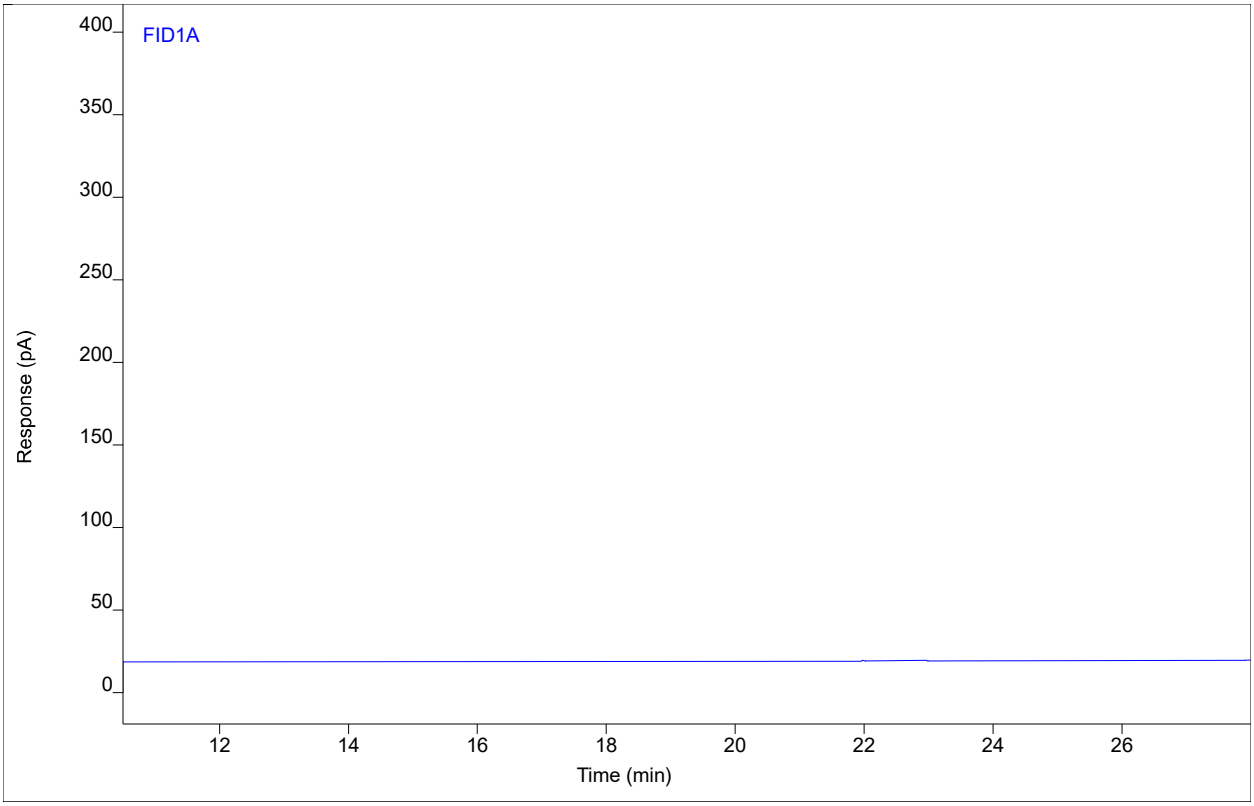
Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
2,2,4-Trimethylpentane	VB	17.41	159.140	94.5749	17.0721	1	17.0721	ppb
Heptane	BB	17.66	137.742	95.2799	17.0408	1	17.0408	ppb
Methylcyclohexane	BB	18.24	138.246	88.1553	16.7596	1	16.7596	ppb
2,3,4-Trimethylpentane	BB	18.94	157.762	97.5658	16.9568	1	16.9568	ppb
Toluene	BB	19.06	137.064	94.9831	18.1072	1	18.1072	ppb
2-Methylheptane	BB	19.27	156.121	105.789	17.2447	1	17.2447	ppb
3-Methylheptane	BB	19.45	152.580	100.669	16.8289	1	16.8289	ppb
n-Octane	BB	20.05	153.746	105.362	17.2530	1	17.2530	ppb
Ethylbenzene	BB	21.25	152.906	106.467	18.5347	1	18.5347	ppb
m-Xylene	BV	21.43	78.7140	58.0191	9.67446	1	9.67446	ppb
p-Xylene	VB	21.46	81.3759	58.9183	10.1355	1	10.1355	ppb
Styrene	BB	21.81	163.383	129.156	21.1655	1	21.1655	ppb
o-Xylene	BB	21.91	155.521	123.555	19.5833	1	19.5833	ppb
n-Nonane	BB	22.15	173.590	145.478	18.0549	1	18.0549	ppb
Isopropylbenzene	BB	22.46	177.354	152.312	19.2295	1	19.2295	ppb
n-Dodecane	BB	25.32	293.824	364.046	36.9423	1	36.9423	ppb

Chromatogram Report

Enthalpy Analytical

Sample Name	N2 #MB Humid
Sequence Name	DPGC9-022723 ver.2
Inj Data File	_007_003F0701.D
File Location	3 - Houston Lab/Data/GC9/2023_Q1
Injection Date	2/27/2023 1:40 PM
File Modified	3/1/2023 8:55 AM
Instrument	DP-GC09
Operator	Katrina Krch

Sample Type	Sample
Vial Number	Vial 3
Injection Volume	NA
Injection	1 of 1
Acquisition Method	DPGC9-ACQ_122822A.M
Analysis Method	DPGC9-F_122822-LIMS.M
Method Modified	3/1/2023 8:55 AM
Printed	3/1/2023 2:39 PM



Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
Isopentane		(11.20)				1		ppb
1-Pentene		(11.60)				1		ppb
Pentane		(12.00)				1		ppb
Isoprene		(12.15)				1		ppb
trans-2-Pentene		(12.28)				1		ppb
cis-2-Pentene		(12.50)				1		ppb
2,2-Dimethylbutane		(13.13)				1		ppb
Cyclopentane		(13.88)				1		ppb
2,3-Dimethylbutane		(13.98)				1		ppb
2-Methylpentane		(14.13)				1		ppb
3-Methylpentane		(14.54)				1		ppb
1-Hexene		(14.71)				1		ppb
Hexane		(15.02)				1		ppb
Methylcyclopentane		(15.72)				1		ppb
2,4-Dimethylpentane		(15.80)				1		ppb
Benzene		(16.38)				1		ppb
Cyclohexane		(16.64)				1		ppb
2-Methylhexane		(16.83)				1		ppb
2,3-Dimethylpentane		(16.89)				1		ppb
3-Methylhexane		(17.06)				1		ppb

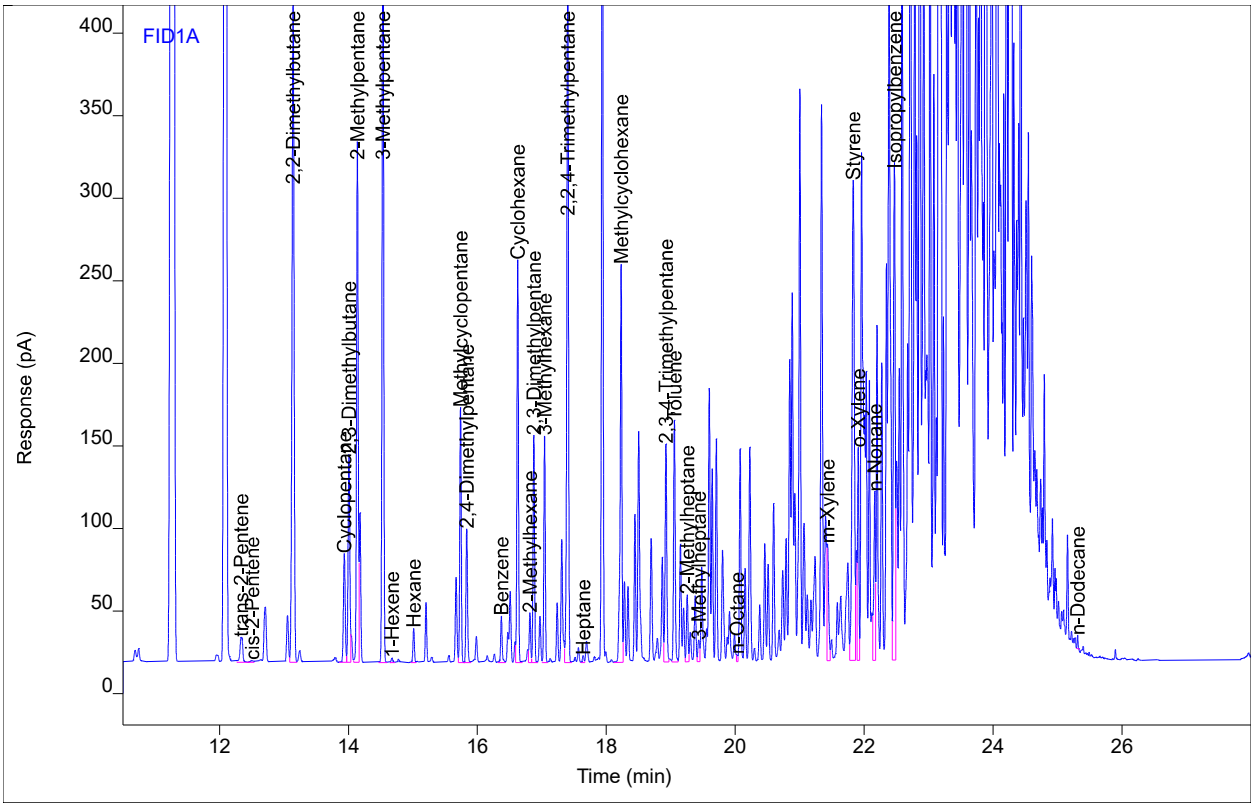
Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
2,2,4-Trimethylpentane		(17.42)				1		ppb
Heptane		(17.67)				1		ppb
Methylcyclohexane		(18.24)				1		ppb
2,3,4-Trimethylpentane		(18.95)				1		ppb
Toluene		(19.07)				1		ppb
2-Methylheptane		(19.27)				1		ppb
3-Methylheptane		(19.45)				1		ppb
n-Octane		(20.05)				1		ppb
Ethylbenzene		(21.27)				1		ppb
m-Xylene		(21.42)				1		ppb
p-Xylene		(21.48)				1		ppb
Styrene		(21.82)				1		ppb
o-Xylene		(21.93)				1		ppb
n-Nonane		(22.17)				1		ppb
Isopropylbenzene		(22.48)				1		ppb
n-Dodecane		(25.33)				1		ppb

Chromatogram Report

Enthalpy Analytical

Sample Name	0223-1016.GP10A C70520.Bag
Sequence Name	DPGC9-022723 ver.2
Inj Data File	_011_001F1101.D
File Location	3 - Houston Lab/Data/GC9/2023_Q1
Injection Date	2/27/2023 4:31 PM
File Modified	3/1/2023 11:18 AM
Instrument	DP-GC09
Operator	Katrina Krch

Sample Type	Sample
Vial Number	Vial 1
Injection Volume	NA
Injection	1 of 1
Acquisition Method	DPGC9-ACQ_122822A.M
Analysis Method	DPGC9-F_122822-LIMS.M
Method Modified	3/1/2023 11:06 AM
Printed	3/1/2023 2:39 PM



Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
1-Pentene		(11.60)				1.32		ppb
trans-2-Pentene	VV	12.34	44.9795	15.4324	7.56046	1.32	9.97981	ppb
cis-2-Pentene	VV	12.51	3.77501	1.44237	0.63569	1.32	0.83911	ppb
2,2-Dimethylbutane	VV	13.14	895.729	398.171	126.873	1.32	167.473	ppb
Cyclopentane	VV	13.94	124.624	66.0760	20.9785	1.32	27.6917	ppb
2,3-Dimethylbutane MI "II" KMK	MF	14.01	242.815	126.149	34.1061	1.32	45.0200	ppb
2-Methylpentane	VV	14.14	555.690	315.527	77.8518	1.32	102.764	ppb
3-Methylpentane	VB	14.53	862.701	510.924	121.774	1.32	160.741	ppb
1-Hexene	BB	14.67	4.62344	2.82080	0.65189	1.32	0.86050	ppb
Hexane	BV	15.01	32.5117	21.0439	4.61240	1.32	6.08837	ppb
Methylcyclopentane	VV	15.74	246.696	154.878	34.5817	1.32	45.6478	ppb
2,4-Dimethylpentane	VB	15.84	140.338	81.1905	17.0802	1.32	22.5459	ppb
Benzene	BV	16.37	45.7464	28.5208	6.67200	1.32	8.80704	ppb
Cyclohexane	VB	16.63	392.366	244.148	55.3137	1.32	73.0140	ppb
2-Methylhexane	VV	16.82	49.0003	30.2344	6.07308	1.32	8.01647	ppb
2,3-Dimethylpentane	VV	16.88	225.858	137.915	26.7555	1.32	35.3172	ppb
3-Methylhexane	VV	17.04	214.228	137.610	25.5426	1.32	33.7162	ppb
2,2,4-Trimethylpentane	VB	17.40	790.381	435.730	84.7899	1.32	111.923	ppb
Heptane	VV	17.64	7.30932	4.72458	0.90428	1.32	1.19365	ppb
Methylcyclohexane	VV	18.23	447.035	240.777	54.1943	1.32	71.5364	ppb

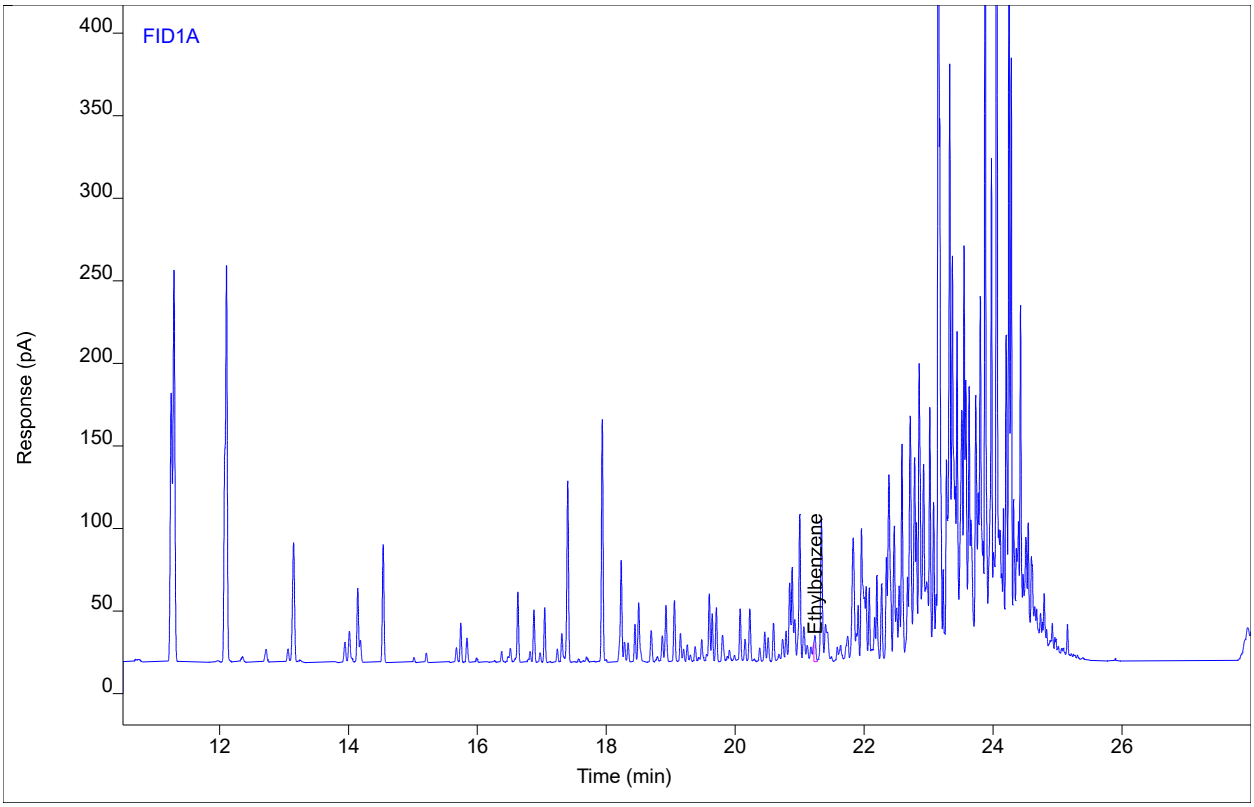
Compound		Type	RT	Area	Height	Amount	DF	SampAmt	Unit
2,3,4-Trimethylpentane		VV	18.93	241.919	132.387	26.0024	1.32	34.3231	ppb
Toluene		VV	19.06	251.587	146.006	33.2366	1.32	43.8723	ppb
2-Methylheptane		VV	19.26	68.1440	41.0676	7.52701	1.32	9.93566	ppb
3-Methylheptane		VV	19.44	24.9393	13.1958	2.75070	1.32	3.63092	ppb
n-Octane		VV	20.03	5.86420	4.46831	0.65806	1.32	0.86865	ppb
m-Xylene		VV	21.43	126.809	71.2545	15.5856	1.32	20.5730	ppb
p-Xylene			(21.45)				1.32		ppb
Styrene		VV	21.83	736.637	290.749	95.4274	1.32	125.964	ppb
o-Xylene		VV	21.91	196.836	129.278	24.7858	1.32	32.7172	ppb
n-Nonane		VV	22.17	174.396	102.362	18.1387	1.32	23.9431	ppb
Isopropylbenzene		VV	22.47	569.120	301.971	61.7062	1.32	81.4522	ppb
n-Dodecane	MI "II" KMK	MM	25.31	7.79554	8.34981	0.98013	1.32	1.29377	ppb

Chromatogram Report

Enthalpy Analytical

Sample Name	0223-1016.GP10A C70520.Bag
Sequence Name	DPGC9-022723 ver.2
Inj Data File	_012_001F1201.D
File Location	3 - Houston Lab/Data/GC9/2023_Q1
Injection Date	2/27/2023 5:12 PM
File Modified	3/1/2023 11:10 AM
Instrument	DP-GC09
Operator	Katrina Krch

Sample Type	Sample
Vial Number	Vial 1
Injection Volume	NA
Injection	1 of 1
Acquisition Method	DPGC9-ACQ_122822A.M
Analysis Method	DPGC9-F_122822-LIMS.M
Method Modified	3/1/2023 11:06 AM
Printed	3/1/2023 2:39 PM



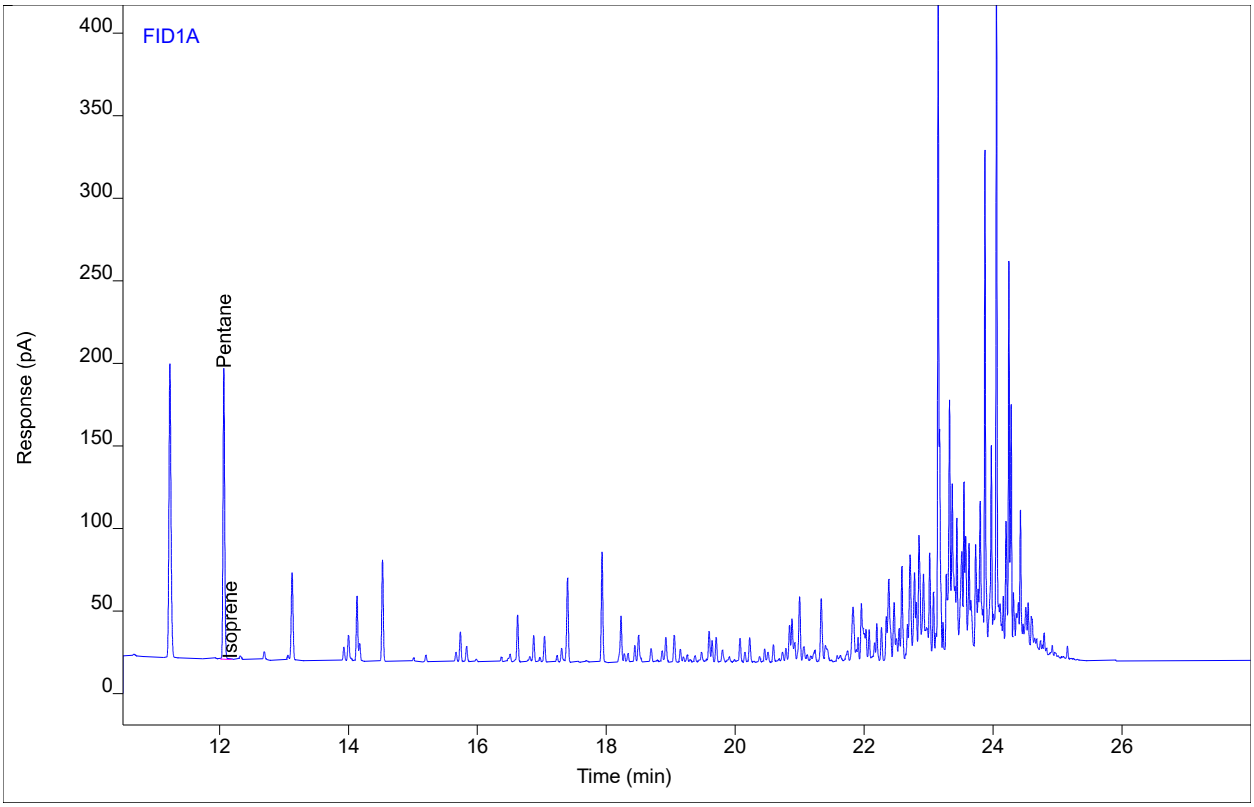
Compound		Type	RT	Area	Height	Amount	DF	SampAmt	Unit
Isopentane			(11.20)				5.28		ppb
Ethylbenzene	MI "II" KMK	FM	21.24	30.6851	16.3931	3.71953	5.28	19.6391	ppb

Chromatogram Report

Enthalpy Analytical

Sample Name	0223-1016.GP10A C70520.Bag
Sequence Name	DPGC9-022723 ver.2
Inj Data File	_013_001F1301.D
File Location	3 - Houston Lab/Data/GC9/2023_Q1
Injection Date	2/27/2023 5:52 PM
File Modified	3/1/2023 11:06 AM
Instrument	DP-GC09
Operator	Katrina Krch

Sample Type	Sample
Vial Number	Vial 1
Injection Volume	NA
Injection	1 of 1
Acquisition Method	DPGC9-ACQ_122822A.M
Analysis Method	DPGC9-F_122822-LIMS.M
Method Modified	3/1/2023 11:06 AM
Printed	3/1/2023 2:39 PM



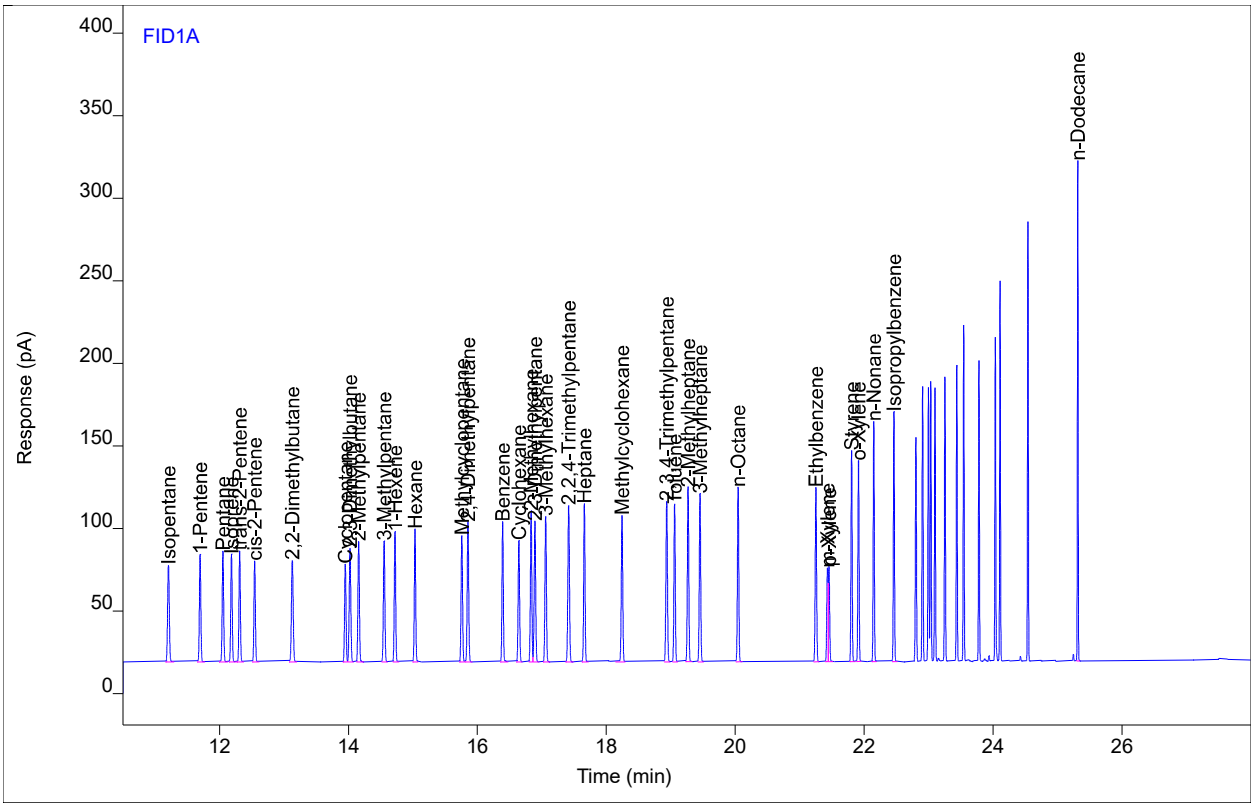
Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
Pentane	BV	12.07	318.798	176.248	53.1934	13.2	702.153	ppb
Isoprene	VV	12.16	1.06018	0.46039	0.17779	13.2	2.34682	ppb

Chromatogram Report

Enthalpy Analytical

Sample Name	Prep1p231 #P7
Sequence Name	DPGC9-022723 ver.2
Inj Data File	_015_015F1501.D
File Location	3 - Houston Lab/Data/GC9/2023_Q1
Injection Date	2/27/2023 7:18 PM
File Modified	3/1/2023 9:01 AM
Instrument	DP-GC09
Operator	Katrina Krch

Sample Type	Sample
Vial Number	Vial 15
Injection Volume	NA
Injection	1 of 1
Acquisition Method	DPGC9-ACQ_122822A.M
Analysis Method	DPGC9-F_122822-LIMS.M
Method Modified	3/1/2023 9:01 AM
Printed	3/1/2023 2:39 PM



Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
Isopentane	BB	11.21	106.024	59.0042	17.5853	1	17.5853	ppb
1-Pentene	BB	11.70	102.181	65.3139	17.1152	1	17.1152	ppb
Pentane	BB	12.05	106.119	67.3590	17.7066	1	17.7066	ppb
Isoprene	BB	12.19	101.292	65.1867	16.9863	1	16.9863	ppb
trans-2-Pentene	BB	12.31	100.699	67.4693	16.9262	1	16.9262	ppb
cis-2-Pentene	BB	12.55	93.4315	61.2903	15.7333	1	15.7333	ppb
2,2-Dimethylbutane	BB	13.13	117.771	61.8879	16.6814	1	16.6814	ppb
Cyclopentane	BV	13.95	93.7319	59.5814	15.7784	1	15.7784	ppb
2,3-Dimethylbutane	VB	14.02	119.482	69.1634	16.7825	1	16.7825	ppb
2-Methylpentane	BB	14.16	117.401	73.1373	16.4478	1	16.4478	ppb
3-Methylpentane	BB	14.55	117.652	73.5140	16.6070	1	16.6070	ppb
1-Hexene	BB	14.72	116.619	78.8916	16.4431	1	16.4431	ppb
Hexane	BB	15.03	118.148	80.5554	16.7615	1	16.7615	ppb
Methylcyclopentane	BB	15.76	119.240	76.8023	16.7150	1	16.7150	ppb
2,4-Dimethylpentane	BB	15.85	136.668	84.9638	16.6335	1	16.6335	ppb
Benzene	BB	16.39	122.445	85.0279	17.8583	1	17.8583	ppb
Cyclohexane	BB	16.64	116.347	73.7073	16.4020	1	16.4020	ppb
2-Methylhexane	BV	16.83	137.967	91.4014	17.0996	1	17.0996	ppb
2,3-Dimethylpentane	VB	16.89	136.697	85.6234	16.1933	1	16.1933	ppb
3-Methylhexane	BB	17.06	135.911	88.3467	16.2047	1	16.2047	ppb

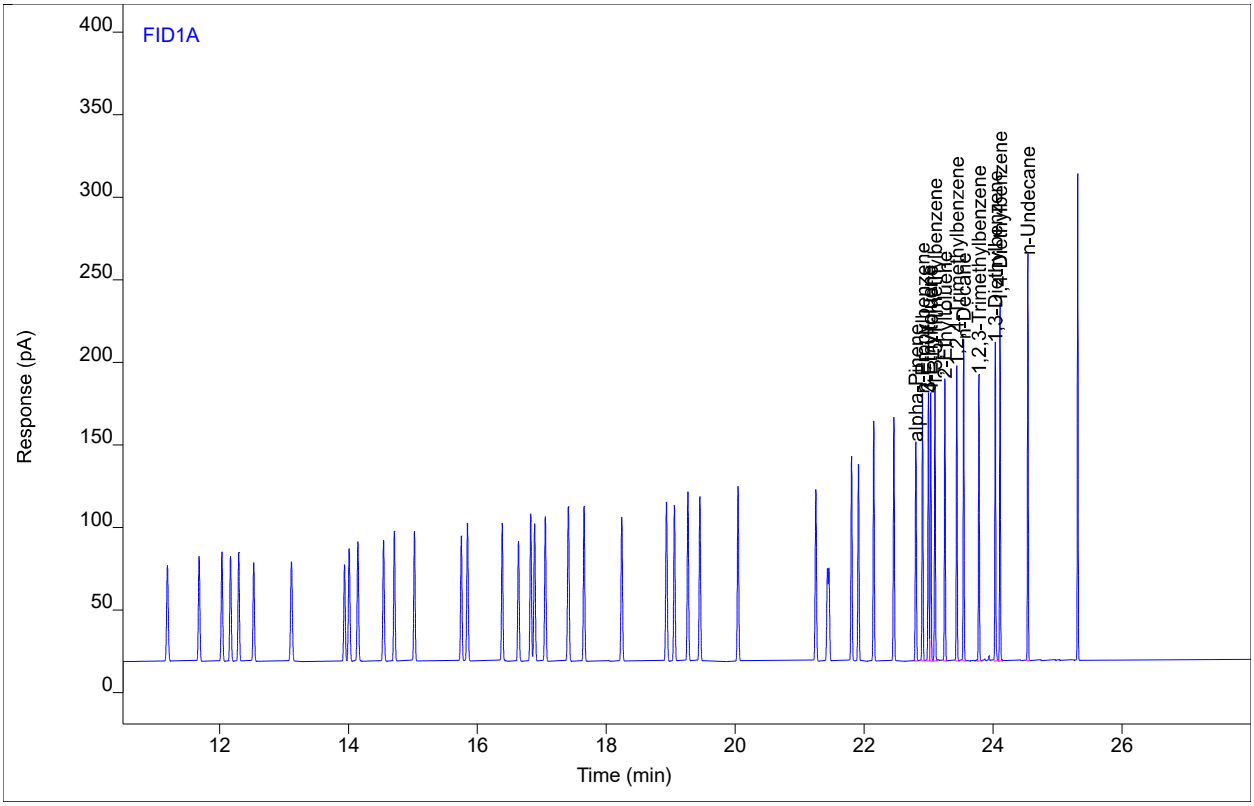
Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
2,2,4-Trimethylpentane	VB	17.42	160.274	94.9761	17.1938	1	17.1938	ppb
Heptane	BB	17.66	138.319	95.8595	17.1122	1	17.1122	ppb
Methylcyclohexane	BB	18.24	139.182	88.8534	16.8730	1	16.8730	ppb
2,3,4-Trimethylpentane	BB	18.94	158.380	97.3644	17.0233	1	17.0233	ppb
Toluene	BB	19.06	137.549	95.5986	18.1713	1	18.1713	ppb
2-Methylheptane	BB	19.27	156.724	106.023	17.3113	1	17.3113	ppb
3-Methylheptane	BB	19.45	153.127	101.903	16.8893	1	16.8893	ppb
n-Octane	BB	20.05	154.267	105.860	17.3115	1	17.3115	ppb
Ethylbenzene	BB	21.25	153.096	105.619	18.5577	1	18.5577	ppb
m-Xylene	BV	21.43	79.6385	57.1593	9.78809	1	9.78809	ppb
p-Xylene	VB	21.46	80.2744	57.8116	9.99833	1	9.99833	ppb
Styrene	BB	21.81	162.625	127.723	21.0672	1	21.0672	ppb
o-Xylene	BB	21.91	154.591	121.675	19.4662	1	19.4662	ppb
n-Nonane	BB	22.15	173.443	145.380	18.0396	1	18.0396	ppb
Isopropylbenzene	BB	22.46	176.957	151.957	19.1864	1	19.1864	ppb
n-Dodecane	BB	25.32	246.560	304.528	30.9999	1	30.9999	ppb

Chromatogram Report

Enthalpy Analytical

Sample Name	Prep1p231 #P7
Sequence Name	DPGC9-022823 ver.2
Inj Data File	_002_015F0201.D
File Location	3 - Houston Lab/Data/GC9/2023_Q1
Injection Date	2/28/2023 9:20 AM
File Modified	3/1/2023 9:11 AM
Instrument	DP-GC09
Operator	Katrina Krch

Sample Type	Sample
Vial Number	Vial 15
Injection Volume	NA
Injection	2 of 2
Acquisition Method	DPGC9-ACQ_122822A.M
Analysis Method	DPGC9-F_122822-LIMS.M
Method Modified	1/26/2023 3:59 PM
Printed	3/1/2023 2:39 PM



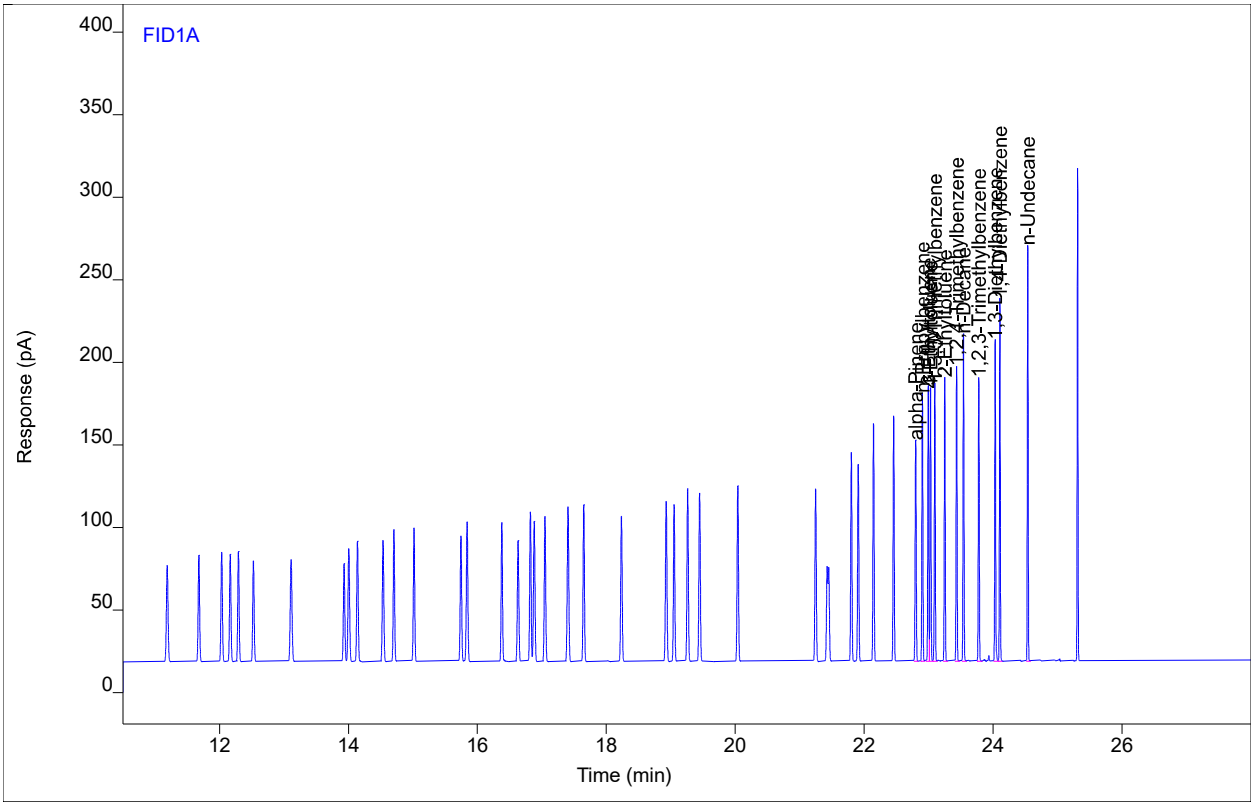
Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
alpha-Pinene	BB	22.80	155.922	133.407	16.0026	1	16.0026	ppb
n-Propylbenzene	BB	22.91	172.099	162.701	19.6577	1	19.6577	ppb
3-Ethyltoluene	BV	23.00	169.903	162.546	19.8387	1	19.8387	ppb
4-Ethyltoluene	VV	23.03	169.323	163.281	19.5211	1	19.5211	ppb
1,3,5-Trimethylbenzene	VV	23.10	170.118	166.599	19.6497	1	19.6497	ppb
2-Ethyltoluene	BB	23.25	170.535	170.751	19.8702	1	19.8702	ppb
1,2,4-Trimethylbenzene	BB	23.44	174.021	179.530	20.4306	1	20.4306	ppb
n-Decane	BB	23.55	190.308	195.403	18.9702	1	18.9702	ppb
1,2,3-Trimethylbenzene	VB	23.78	168.012	174.510	20.2868	1	20.2868	ppb
1,3-Diethylbenzene	BV	24.04	180.820	194.381	19.7916	1	19.7916	ppb
1,4-Diethylbenzene	VB	24.11	197.566	217.523	21.5695	1	21.5695	ppb
n-Undecane	BB	24.54	218.423	247.783	22.0439	1	22.0439	ppb

Chromatogram Report

Enthalpy Analytical

Sample Name	Prep1p231 #P7 Dup
Sequence Name	DPGC9-022823 ver.2
Inj Data File	_003_015F0301.D
File Location	3 - Houston Lab/Data/GC9/2023_Q1
Injection Date	2/28/2023 10:02 AM
File Modified	3/1/2023 9:11 AM
Instrument	DP-GC09
Operator	Katrina Krch

Sample Type	Sample
Vial Number	Vial 15
Injection Volume	NA
Injection	1 of 1
Acquisition Method	DPGC9-ACQ_122822A.M
Analysis Method	DPGC9-F_122822-LIMS.M
Method Modified	1/26/2023 3:59 PM
Printed	3/1/2023 2:39 PM



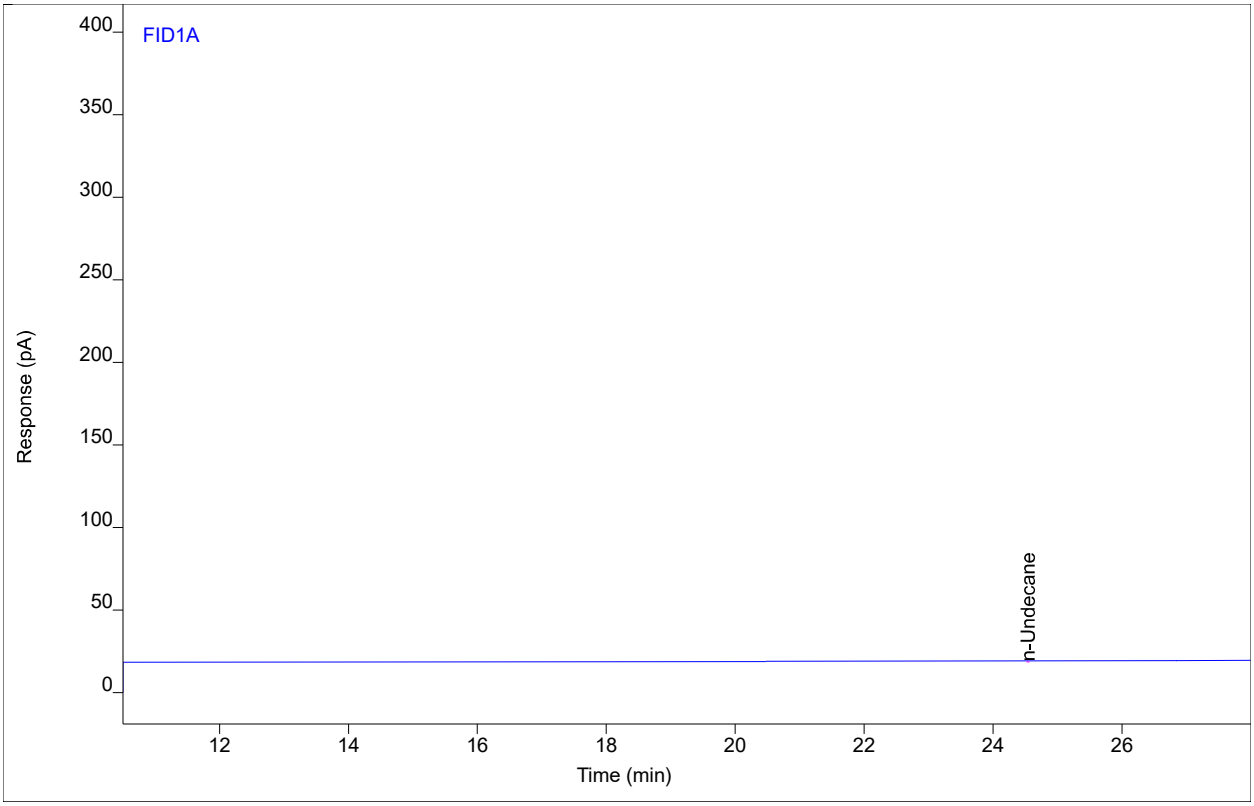
Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
alpha-Pinene	BB	22.80	157.472	134.423	16.1617	1	16.1617	ppb
n-Propylbenzene	BB	22.90	173.968	163.562	19.8712	1	19.8712	ppb
3-Ethyltoluene	BV	23.00	171.987	167.057	20.0820	1	20.0820	ppb
4-Ethyltoluene	VV	23.03	171.298	166.323	19.7487	1	19.7487	ppb
1,3,5-Trimethylbenzene	VV	23.10	172.149	169.313	19.8843	1	19.8843	ppb
2-Ethyltoluene	BB	23.25	172.556	171.950	20.1057	1	20.1057	ppb
1,2,4-Trimethylbenzene	BB	23.44	176.067	179.369	20.6708	1	20.6708	ppb
n-Decane	BB	23.54	192.778	198.953	19.2165	1	19.2165	ppb
1,2,3-Trimethylbenzene	VB	23.78	170.025	172.565	20.5298	1	20.5298	ppb
1,3-Diethylbenzene	BV	24.03	183.067	195.783	20.0375	1	20.0375	ppb
1,4-Diethylbenzene	VB	24.11	199.890	220.687	21.8232	1	21.8232	ppb
n-Undecane	BB	24.54	221.524	253.247	22.3568	1	22.3568	ppb

Chromatogram Report

Enthalpy Analytical

Sample Name	Blank
Sequence Name	DPGC9-022823 ver.2
Inj Data File	_005_003F0501.D
File Location	3 - Houston Lab/Data/GC9/2023_Q1
Injection Date	2/28/2023 11:26 AM
File Modified	3/1/2023 9:11 AM
Instrument	DP-GC09
Operator	Katrina Krch

Sample Type	Sample
Vial Number	Vial 3
Injection Volume	NA
Injection	2 of 2
Acquisition Method	DPGC9-ACQ_122822A.M
Analysis Method	DPGC9-F_122822-LIMS.M
Method Modified	1/26/2023 3:59 PM
Printed	3/1/2023 2:39 PM



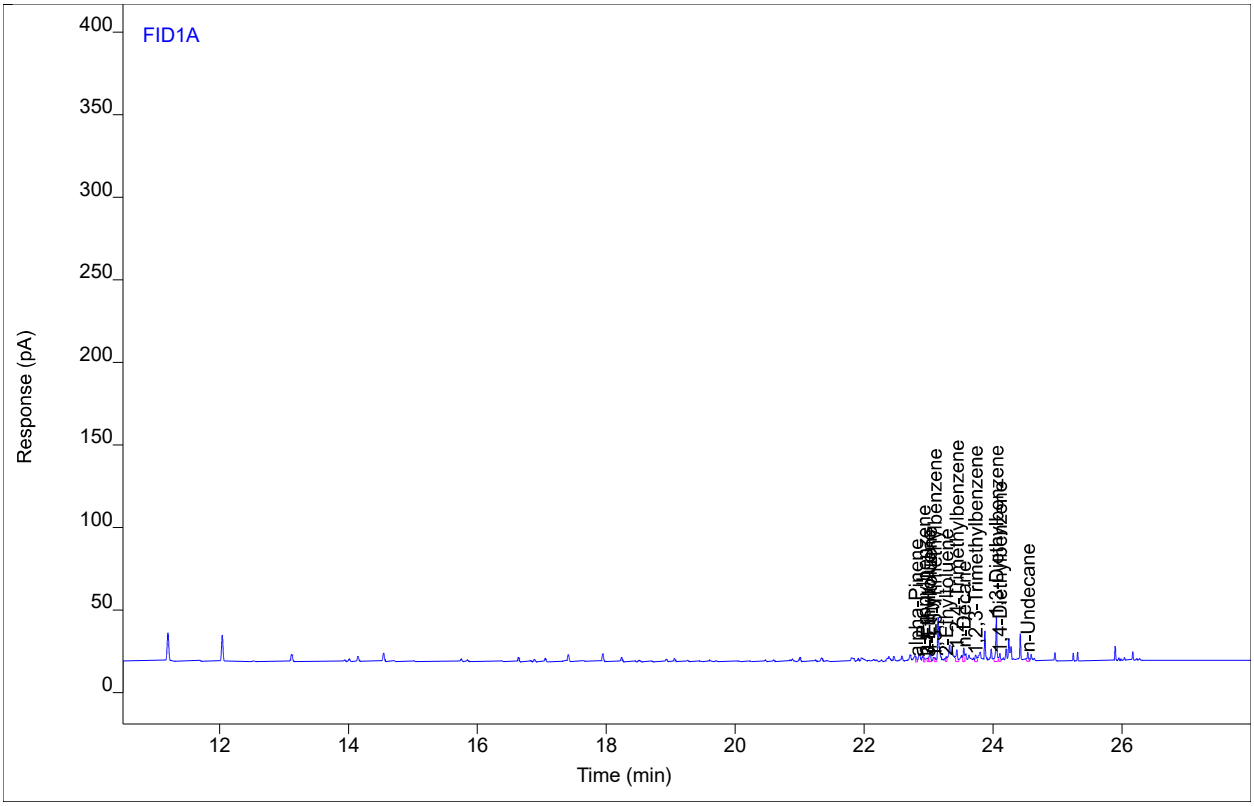
Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
alpha-Pinene		(22.82)				1		ppb
n-Propylbenzene		(22.92)				1		ppb
3-Ethyltoluene		(23.00)				1		ppb
4-Ethyltoluene		(23.05)				1		ppb
1,3,5-Trimethylbenzene		(23.10)				1		ppb
2-Ethyltoluene		(23.27)				1		ppb
1,2,4-Trimethylbenzene		(23.45)				1		ppb
n-Decane		(23.56)				1		ppb
1,2,3-Trimethylbenzene		(23.80)				1		ppb
1,3-Diethylbenzene		(24.04)				1		ppb
1,4-Diethylbenzene		(24.12)				1		ppb
n-Undecane	BB	24.54	0.31336	0.35193	0.03163	1	0.03163	ppb

Chromatogram Report

Enthalpy Analytical

Sample Name	0223-1016.GP10A C70520.Bag
Sequence Name	DPGC9-022823 ver.2
Inj Data File	_006_001F0601.D
File Location	3 - Houston Lab/Data/GC9/2023_Q1
Injection Date	2/28/2023 12:09 PM
File Modified	3/1/2023 10:34 AM
Instrument	DP-GC09
Operator	Katrina Krch

Sample Type	Sample
Vial Number	Vial 1
Injection Volume	NA
Injection	1 of 1
Acquisition Method	DPGC9-ACQ_122822A.M
Analysis Method	DPGC9-F_122822-LIMS.M
Method Modified	3/1/2023 10:33 AM
Printed	3/1/2023 2:39 PM



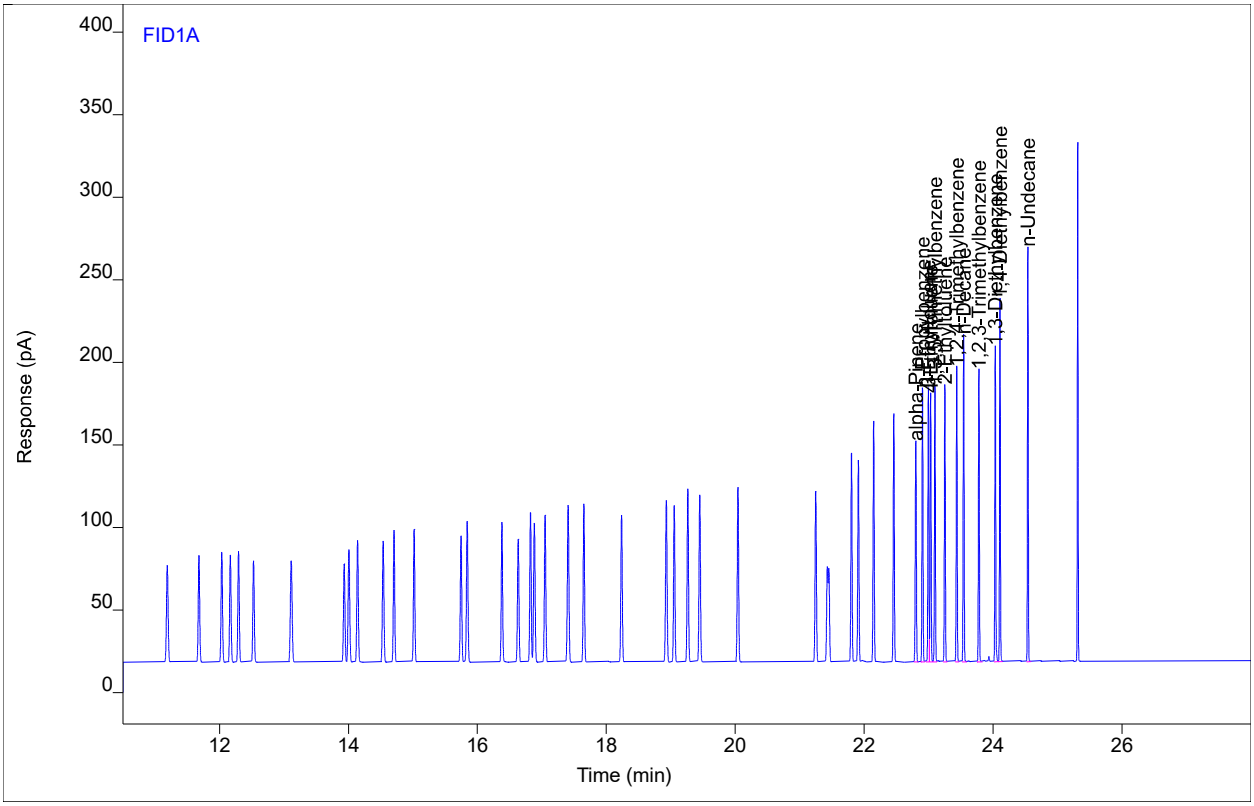
Compound		Type	RT	Area	Height	Amount	DF	SampAmt	Unit
alpha-Pinene		VV	22.81	4.42222	3.24377	0.45386	133.32	60.5089	ppb
n-Propylbenzene	MI "II" KMK	FM	22.92	4.34241	3.56762	0.49600	133.32	66.1271	ppb
3-Ethyltoluene		VV	23.00	3.17400	2.72012	0.37061	133.32	49.4099	ppb
4-Ethyltoluene		VV	23.02	8.33681	4.60423	0.96114	133.32	128.139	ppb
1,3,5-Trimethylbenzene		VV	23.10	3.91419	2.46614	0.45211	133.32	60.2759	ppb
2-Ethyltoluene		VV	23.28	4.05569	3.37521	0.47256	133.32	63.0014	ppb
1,2,4-Trimethylbenzene		VV	23.44	10.6987	7.66442	1.25606	133.32	167.458	ppb
n-Decane		VV	23.55	10.6300	8.60954	1.05962	133.32	141.269	ppb
1,2,3-Trimethylbenzene		VV	23.73	7.14053	4.20694	0.86219	133.32	114.947	ppb
1,3-Diethylbenzene	MI "II" KMK	MF	24.05	34.5094	26.8160	3.77720	133.32	503.577	ppb
1,4-Diethylbenzene	MI "II" KMK	FM	24.11	6.21892	4.97886	0.67896	133.32	90.5188	ppb
n-Undecane		VV	24.54	6.58546	5.47682	0.66462	133.32	88.6076	ppb

Chromatogram Report

Enthalpy Analytical

Sample Name	Prep1p231 #P7
Sequence Name	DPGC9-022823 ver.2
Inj Data File	_011_015F1101.D
File Location	3 - Houston Lab/Data/GC9/2023_Q1
Injection Date	2/28/2023 3:51 PM
File Modified	3/1/2023 9:25 AM
Instrument	DP-GC09
Operator	Katrina Krch

Sample Type	Sample
Vial Number	Vial 15
Injection Volume	NA
Injection	1 of 1
Acquisition Method	DPGC9-ACQ_122822A.M
Analysis Method	DPGC9-F_122822-LIMS.M
Method Modified	3/1/2023 9:24 AM
Printed	3/1/2023 2:39 PM



Compound	Type	RT	Area	Height	Amount	DF	SampAmt	Unit
alpha-Pinene	BB	22.80	157.948	134.284	16.2105	1	16.2105	ppb
n-Propylbenzene	BB	22.91	174.315	166.267	19.9107	1	19.9107	ppb
3-Ethyltoluene	BV	23.00	172.587	166.598	20.1520	1	20.1520	ppb
4-Ethyltoluene	VV	23.03	171.529	163.587	19.7754	1	19.7754	ppb
1,3,5-Trimethylbenzene	VV	23.10	172.347	167.520	19.9073	1	19.9073	ppb
2-Ethyltoluene	BB	23.25	172.653	167.807	20.1170	1	20.1170	ppb
1,2,4-Trimethylbenzene	BB	23.44	176.283	180.274	20.6962	1	20.6962	ppb
n-Decane	BB	23.54	193.114	199.111	19.2500	1	19.2500	ppb
1,2,3-Trimethylbenzene	VB	23.78	169.947	178.497	20.5204	1	20.5204	ppb
1,3-Diethylbenzene	BV	24.04	182.654	192.165	19.9923	1	19.9923	ppb
1,4-Diethylbenzene	VB	24.11	199.688	220.918	21.8012	1	21.8012	ppb
n-Undecane	BB	24.54	222.267	252.299	22.4318	1	22.4318	ppb

This Is The Last Page Of This Report.

ENTHALPY ANALYTICAL

ATTACHMENT 4 – Fee Payment Receipt

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: 582EA000564102
Date: 08/11/2023 02:06 PM
Payment Method: CC - Authorization 000009373G
ePay Actor: JORDAN DIMEZZO
Actor Email: [redacted]
IP: 66.76.63.105
TCEQ Amount: $150.00
Texas.gov Price: $153.63*

* 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: JORDAN DIMEZZO
Company: HYDREX ENVIRONMENTAL
Address: 312 OLD TYLER ROAD, NACOGDOCHES, TX 75961
Phone: 936-568-9451

Cart Items

Click on the voucher number to see the voucher details.

Voucher	Fee Description	AR Number	Amount
656430	MSW PERMIT/REGISTRATION/AMEND/MOD/TEMP AUTHORIZATIONS APPLICATION FEE		$100.00
656431	30 TAC 305.53B MWP NOTIFICATION FEE		$50.00
		TCEQ Amount:	$150.00

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 5 – Land Ownership Map

GREENBELT LANDFILL

PERMIT BOUNDARY

SEE INSERT ON THIS SHEET

1/4 MILE RADIUS

INTENDED FOR PERMITTING PURPOSES ONLY

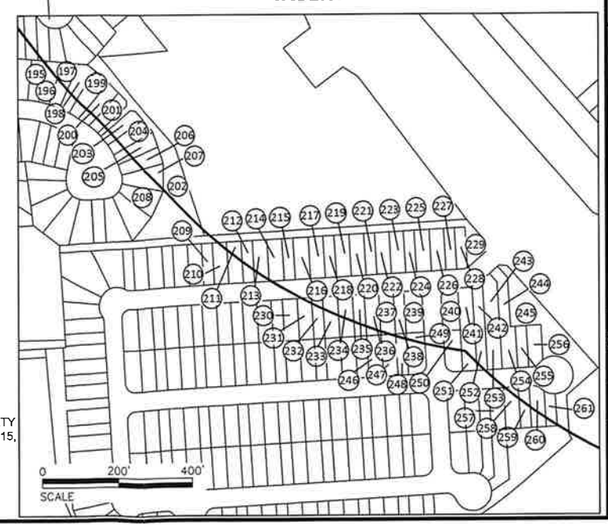
SCALE
0 300 600 FEET

STATE OF TEXAS
JAMES ROY MURRAY III
73860
LICENSED
PROFESSIONAL ENGINEER
10/15/21

LEGEND

- PERMIT BOUNDARY
- 1/4 MILE RADIUS
- (17) LAND OWNER DESIGNATION

INSERT



NOTES:

1. PROPERTY AND MINERAL OWNERS' NAMES AND MAILING ADDRESSES WERE RESEARCHED FROM HARRIS COUNTY APPRAISAL DISTRICT REAL PROPERTY ACCOUNT INFORMATION RECORDS AS OF OCTOBER 15, 2021. SEE CORRESPONDING LIST IN PART I/II, APPENDIX I/II-D FOR NAMES AND ADDRESSES.
2. NO MINERAL OWNERS UNDER THE FACILITY WERE FOUND IN THE APPRAISAL DISTRICT RECORDS.

REV	DATE	DESCRIPTION	BY

TEXAS BOARD OF PROFESSIONAL ENGINEERS REG. NO. F-3407

DRAWING TITLE: LAND AND MINERAL INTEREST OWNERSHIP MAP

PROJECT TITLE: PERMIT AMENDMENT APPLICATION
PERMIT NO. MSW-1586B

WASTE CORPORATION OF TEXAS, L.P.
GREENBELT LANDFILL
HOUSTON, HARRIS COUNTY, TEXAS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
12851 BRIAR FOREST, SUITE 205, HOUSTON, TX 77077
PH (281) 293-8494 FAX NO. (281) 293-7878

PROJ. NO.	DES. BY:	C/A RVW BY:
162J3104.14	SF	JKR
	DRN. BY: SF	APP. BY: JRM
	CHK. BY: JRM	

CADD FILE: FIGURE I_II-7 LAND AND MINERAL INTEREST OWNERSHIP MAP

DATE: 10/2021

SCALE: AS SHOWN

DRAWING NO.

I/II-7

ATTACHMENT 6 – Land Ownership List

LAND OWNERSHIP LIST

Landowners Cross-Referenced to Land and Mineral Interest Ownership Map, Figure I/II-7.

1. WASTE CORP TEXAS INC
   TAX DEPT
   100 NEW PARK PL STE 500
   VAUGHAN ON L4K OH9
   CANADA

2. WASTE CORP TEXAS INC
   TAX DEPT
   100 NEW PARK PL STE 500
   VAUGHAN ON L4K OH9
   CANADA

3. WASTE CORPORATION OF TEXAS LP
   TAX DEPT
   100 NEW PARK PL STE 500
   VAUGHAN ON L4K OH9
   CANADA

4. WASTE CORP OF TEXAS LP
   TAX DEPT
   100 NEW PARK PL STE 500
   VAUGHAN ON L4K OH9
   CANADA

5. WASTE CORP TEXAS INC
   TAX DEPT
   100 NEW PARK PL STE 500
   VAUGHAN ON L4K OH9
   CANADA

6. WASTE CORPORATION OF TEXAS
TAX DEPT
100 NEW PARK PL STE 500
VAUGHAN ON L4K OH9
CANADA

7. WASTE CORPORATION OF TEX LP
TAX DEPT
100 NEW PARK PL STE 500
VAUGHAN ON L4K OH9
CANADA

8. WASTE CORP OF TX INC
TAX DEPT
100 NEW PARK PL STE 500
VAUGHAN ON L4K OH9
CANADA

9. WASTE CORPORATION OF TEXAS L P
TAX DEPT
100 NEW PARK PL STE 500
VAUGHAN ON L4K OH9
CANADA

10. BRAZORIA COUNTY RECYCLING CENTER INC
PO BOX 1450
CHICAGO IL 60690-1450

11. BRAZORIA COUNTY RECYCLING CENTER INC
PO BOX 1450
CHICAGO IL 60690-1450

12. WASTE CORP TEXAS INC
% WASTE MANAGEMENT
8515 HIGHWAY 6 S
HOUSTON TX 77083-5710

13. BRAZORIA COUNTY RECYCLING CENTER INC
PO BOX 1450
CHICAGO IL 60690-1450

14. BRAZORIA COUNTY RECYCLING CENTER
% WASTE MANAGEMENT
PO BOX 1450
CHICAGO IL 60690-1450

15. BRAZORIA COUNTY RECYCLING CENTER
PO BOX 1450
CHICAGO IL 60690-1450

16. WASTE CORP OF TEXAS INC
TAX DEPT
100 NEW PARK PL STE 500
VAUGHAN ON L4K OH9
CANADA

17. MOUSSAVI SEYED
11938 BRIAR FOREST DR
HOUSTON TX 77077-4133

18. RIVERA JULIO RESENDIZ
126 RHEA ST
HOUSTON TX 77034-4031

19. J KRU LAND SERVICES LLC
10321 KOENIG ST
HOUSTON TX 77034-4026

20. GUZMAN TARESSA
10327 KOENIG ST
HOUSTON TX 77034-4026

21. GUZMAN TARESSA
10327 KOENIG ST
HOUSTON TX 77034-4026

22. BAKER CHARLES
6210 SANDS DR
PASADENA TX 77505-3863

23. BAKER CHARLES
6210 SANDS DR
PASADENA TX 77505-3863

24. ALVAREZ SALVADOR
4310 BLIND RIVER ST
PASADENA TX 77504-3118

25. RESENDEZ ARTURO & REYNA
3304 DARTMOUTH DR
PASADENA TX 77503-1441

26. LESPERANCE CRAIG ALAN
10421 KOENIG ST
HOUSTON TX 77034-4028

27. LUBRIZOL CORPORATION
PO BOX 158
DEER PARK TX 77536-0158

28. LUBRIZOL CORP
PO BOX 158
DEER PARK TX 77536-0158

29. LUBRIZOL CORP
PO BOX 158
DEER PARK TX 77536-0158

30. NOVUS SYSTEMS INC
5900 HAYNESWORTH LN
HOUSTON TX 77034-4029

31. FREEDOM FUEL OPERATING LLC
6002 DEBBIELOU GARDENS DR
HOUSTON TX 77034-2900

32. FREEDOM FUEL LLC
6002 DEBBIELOU GARDENS DR
HOUSTON TX 77034-2900

33. NOVUS WOOD GROUP I LP
5900 HAYNESWORTH LN
HOUSTON TX 77034-4029

34. NOVUS WOOD GROUP LP
6002 DEBBIELOU GARDENS DR
HOUSTON TX 77034-2900

35. NOVUS WOOD GROUP LP
6002 DEBBIELOU GARDENS DR
HOUSTON TX 77034-2900

36. PEARL ROBERT M EST OF
PEARL REVA H
15 GREENWAY PLZ UNIT 4F
HOUSTON TX 77046-1502

37. ARGOS USA LLC
3015 WINDWARD PLAZA UNIT 300
ALPHARETTA GA 30005-8713

38. ENTERPRISE CRUDE PIPELINE LLC
PO BOX 4018
HOUSTON TX 77210-4018

39. ENTERPRISE CRUDE PIPELINE
PO BOX 4018
HOUSTON TX 77210-4018

ENTERPRISE CRUDE PIPELINE
% PROPERTY TAX DEPT
PO BOX 4018
HOUSTON TX 77210-4018

SEAWAY CRUDE PIPELINE COMPANY LLC
PO BOX 4018
HOUSTON TX 77210-4018

ENTERPRISE CRUDE PIPELINE
% PROPERTY TAX DEPT
PO BOX 4018
HOUSTON TX 77210-4018

ENTERPRISE CRUDE PIPELINE
C/O PROPERTY TAX DEPARTMENT
PO BOX 4018
HOUSTON TX 77210-4018

SEAWAY CRUDE PIPELINE COMPANY LLC
PO BOX 4018
HOUSTON TX 77210-4018

40. ENTERPRISE CRUDE PIPELINE LLC
PO BOX 4018
HOUSTON TX 77210-4018

41. ENTERPRISE CRUDE PIPELINE LLC
ATTN: PROPERTY TAX DEPT
PO BOX 4018
HOUSTON TX 77210-4018

42. SANIFILL INC
PO BOX 1450
CHICAGO IL 60690-1450

43. MOON JOHN H SR
% MOON & ASSOCIATES LTD
PO BOX 3487
PASADENA TX 77501-3487

44. SANIFILL INC
PO BOX 1450
CHICAGO IL 60690-1450

45. ENTERPRISE CRUDE PIPELINE LLC
PO BOX 4108
HOUSTON TX 77210-4108

46. ENTERPRISE CRUDE PIPELINE LLC
PO BOX 4018
HOUSTON TX 77210-4018

47. ENTERPRISE CRUDE PIPELINE LLC
PO BOX 4018
HOUSTON TX 77210-4018

48. FRIEDLANDER B ET AL
% STEPHEN L BROCHSTEIN
11845 DURRETTE DR
HOUSTON TX 77024-7128

49. SANIFILL INC
PO BOX 1450
CHICAGO IL 60690-1450

50. TORRES GREGORY
24710 GARNET SHADOW LN
KATY TX 77494-0777

51. BAKER CHARLES
6210 SANDS DR
PASADENA TX 77505-3863

52. CITY OF HOUSTON
PO BOX 1562
HOUSTON TX 77251-1562

53. A&R STORAGE LLC
923 GRAYSON RD
HOUSTON TX 77034-4109

54. GARCIA RICHARD JR
4403 SUGARVINE CT
LEAGUE CITY TX 77573-6239

55. GARCIA RICHARD JR
4403 SUGARVINE CT
LEAGUE CITY TX 77573-6239

56. GARCIA RICHARD JR
4403 SUGARVINE CT
LEAGUE CITY TX 77573-6239

57. GARCIA RICHARD JR
4403 SUGARVINE CT
LEAGUE CITY TX 77573-6239

58. SANIFILL INC
PO BOX 1450
CHICAGO IL 60690-1450

59. DALE-MEL ENTERPRISES LLC
828 OLD GENOA RED BLUFF RD
HOUSTON TX 77034-4011

60. ALEXANDER STERLING H & DORIS A
2601 COCOA LN
PASADENA TX 77502-3229

61. ALEXANDER STERLING & DORIS A
2601 COCOA LN
PASADENA TX 77502-3229

62. AVILES PAULA
810 OLD GENOA RED BLUFF RD
HOUSTON TX 77034-4011

63. STOWE BOYD D
812 OLD GENOA RED BLUFF RD
HOUSTON TX 77034-4011

64. BOULTER VIOLET C ESTATE OF
5 WINDSONG LN
FRIENDSWOOD TX 77546

65. WALLACE MYRA J
808 GENOA RED BLUFF RD
HOUSTON TX 77034

66. FLICKINGER DAVID E
802 GENOA RED BLUFF RD
HOUSTON TX 77034

67. BULLDOG TIRE RECYCLING INC
120 PEACH AVE
CLEVELAND TX 77327-4228

68. URBINA MANUEL II
887 OLD GENOA RED BLUFF RD
HOUSTON TX 77034-4010

69. TOBON MARIBEL
GAONA EZEQUIEL
12001 PALMCREST ST
HOUSTON TX 77034-3711

70. RODRIQUEZ DAVID T
4422 JAMAICA LN
PASADENA TX 77505-4124

71. URBINA FEBE GLORIA
889 OLD GENOA RED BLUFF RD
HOUSTON TX 77034-4010

72. C & TS PROPERTIES LLC
901 OLD GENOA RED BLUFF RD
HOUSTON TX 77034-4101

73. LIMA MODESTO & ISABEL
820 GENOA RED BLUFF RD
HOUSTON TX 77034-4014

74. DODECAHEDRON HOLDINGS LLC
335 S LEMON AVE STE N
WALNUT CA 91789

75. HENECO ENGINEERING & COLSULTING LLC
16350 PARK TEN PLACE STE 211
HOUSTON TX 77084-5147

76. HENECO ENGINEERING & COLSULTING LLC
16350 PARK TEN PLACE STE 211
HOUSTON TX 77084-5147

77. DODECAHEDRON HOLDINGS LLC
335 S LEMON AVE STE N
WALNUT CA 91789

78. PARMER CLAY R
PARMER MARGARET A
PO BOX 7336
PASADENA TX 77508-7336

79. LOZANO ANGEL
641 OLD GENOA RED BLUFF RD
HOUSTON TX 77034-4006

80. YATES GERALD W & PAMELA J
5859 RED BLUFF RD
PASADENA TX 77505-2642

81. YATES GERALD W
5859 RED BLUFF RD
PASADENA TX 77505-2642

82. RAMIREZ MARK ANTHONY & CLAUDIA
5410 MADISON LEE LN
PASADENA TX 77504-3057

83. TRUONG MINH &
NGUYEN MIEN
5415 LAURA LEE LN
PASADENA TX 77504-2384

84. TRAVIS ESTATES OWNERS ASSOCIATION INC
% AVR MANAGEMENT CONSULTANTS INC
17049 EL CAMINO REAL STE 100
HOUSTON TX 77058-2611

85. MARTIN MERLINDA
OCARIZA MYLENE
5411 LAURA LEE LN
PASADENA TX 77504-2384

86. PRESSWALA ZOEB ALI & NAFISA ZOEB
5407 LAURA LEE
PASADENA TX 77504-2384

87. WINKLE LAURA H
5403 LAURA LEE LN
PASADENA TX 77504-2384

88. TRAVIS ESTATES OWNERS ASSOCIATION INC
% AVR MANAGEMENT CONSULTANTS INC
17049 EL CAMINO REAL STE 100
HOUSTON TX 77058-2611

89. ESTRADA ARTURO
ROJAS EMILIA F
5418 LAURA LEE
PASADENA TX 77504-2385

90. MONARREZ CESAR C
5414 LAURA LEE LN
PASADENA TX 77504-2385

91. HERNANDEZ MIGUEL A SR & MARIA G
5410 LAURA LEE LN
PASADENA TX 77504-2385

92. THOMAS PRAMOD & SALLY
5406 LAURA LEE LN
PASADENA TX 77504-2385

1/11-D-13

93. PLUNKETT THOMAS R JR & JENNIFER L
5402 LAURA LEE LN
PASADENA TX 77504-2385

94. NIETO MARGARITA
5326 LAURA LEE LN
PASADENA TX 77504-2377

95. STACY SUE & PAUL L JR
5323 CAMAROSA DR
PASADENA TX 77504-1993

96. NICCOLI JOSEPH
1418 CHANDLER CV
PASADENA TX 77504-1937

97. VELAZQUEZ CARMELO & NORA
1414 CHANDLER CV
PASADENA TX 77504-1937

98. ROY MARIAMMA
1410 CHANDLER CV
PASADENA TX 77504-1937

99. ANDRADE JUAN
1406 CHANDLER CV
PASADENA TX 77504-1937

100. AMH 2014 3 BORROWER LLC
ATTN PROPERTY TAX DEPARTMENT
23975 PARK SORRENTO STE 300
CALABASAS CA 91302-4012

101. DAVIS CHASE M & JADE F
1322 CHANDLER CV
PASADENA TX 77504-1700

102. SALAZAR SYLVIA A & RUDY
1318 CHANDLER CV
PASADENA TX 77504-1700

103. FMCM INVESTMENTS
2507 DEEP OAK CT
HOUSTON TX 77059-3759

104. DELEON ANTONIO & DIANA
1310 CHANDLER CV
PASADENA TX 77504-1700

105. HILDALGO ERIC
1306 CHANDLER CV
PASADENA TX 77504-1700

106. STRAWBERRY GLEN HOA
C/O HCMS
17049 EL CAMINO REAL STE 100
HOUSTON TX 77058-2611

107. HIKMAT ENTERPRISE INC
4739 STRAWBERRY RD
PASADENA TX 77054-3254

108. TX STRAWBERRY APARTMENTS LTD
310 E 96TH STE 400
INDIANAPOLIS IN 46240-3702

109. PASADENA ISD
PO BOX 1318
PASADENA TX 77501-1318

110. PASADENA ISD
PO BOX 1318
PASADENA TX 77501-1318

111. PAUL T & NORLEEN A MCGOWEN FAMILY TRUST
3920 OAKWICK FOREST DR
MISSOURI CITY TX 77459-7006

112. ARCHAMBAULT JOHN L & DEBRA
501 GENOA RED BLUFF RD
HOUSTON TX 77034-4004

113. ROSWELL RONALD & CATHEY
1100 FOX MEADOW DR TRLR 70
ALVIN TX 77511-8748

114. TREVINO JUAN & ALICIA
413 GENOA RED BLUFF RD
HOUSTON TX 77034-4002

115. GUERRA ALICIA
413 GENOA RED BLUFF RD
HOUSTON TX 77034-4002

116. BURNETT MARY LOUISE
5529 ALLEN GENOA RD
HOUSTON TX 77034-3905

117. BURNETT MARY L
5529 ALLEN GENOA RD
HOUSTON TX 77034-3905

118. GRANT BETTY JO
5521 ALLEN GENOA RD
HOUSTON TX 77034-3905

119. WINSTON & JERRY DAVIS FAMILY
LIMITED PARTNERSHIP
WINSTON DAVIS
1112 CRENSHAW RD
PASADENA TX 77504-2911

120. HERNANDEZ MARIO & ANTONIA
5361 ALLEN GENOA RD
HOUSTON TX 77034-3901

121. ENRIQUEZ JAVIER & ALBERTA
5359 ALLEN GENOA RD
HOUSTON TX 77034-3901

122. HERNANDEZ CRYSTAL
ESPINOZA JERSON HERNANDEZ
11200 FUGUA ST SUITE 100
HOUSTON TX 77089-2581

123. GARZA ELIUD
16118 DARRIAN LN
HOUSTON TX 77049-1587

124. DAVIS WINSTON & JERRY ANN
1112 CRENSHAW RD
PASADENA TX 77504-2911

1/11-D-17

125. NATION BESSIE F
114 BYRON
LEAGUE CITY TX 77573-2204

126. TEXAS COMMERCIAL INTERIORS LLC
309 WELDON RD
SOUTH HOUSTON TX 77587-3558

127. TEXAS COMMERCIAL INTERIORS LLC
309 WELDON RD
SOUTH HOUSTON TX 77587-3558

128. CLOUD STORAGE PORTFOLIO LLC
448 W 19TH ST # 916
HOUSTON TX 77008-3914

129. NATION BESSIE F
114 BYRON ST
LEAGUE CITY TX 77573-2204

130. WASTE CORP OF TEXAS LP
TAX DEPT
100 NEW PARK PL STE 500
VAUGHAN ON L4K OH9
CANADA

131. BRANDL DEBBIE A
LEATHERS RONALD R
6352 BONANZA DR
MONTGOMERY TX 77316-4199

132. AYALA REBECCA C
4903 1ST ST
PASADENA TX 77504

133. MG GULF COAST PROPERTIES LLC
613 FOREST BEND LN
FRIENDSWOOD TX 77546-4794

134. GRANT GEORJEAN
227 GENOA RED BLUFF RD
HOUSTON TX 77034-3910

135. WALIA ESTATES LLC
2921 N ISLAND DR
SEABROOK TX 77586-1637

136. WALIA ESTATES LLC
2921 N ISLAND DR
SEABROOK TX 77586-1637

137. WALIA BRIJ
PO BOX 34856
HOUSTON TX 77234-4856

138. WALIA ESTATES LLC
2921 N ISLAND DR
SEABROOK TX 77586-1637

139. CITY OF HOUSTON
PARCEL C97-007
PO BOX 1562
HOUSTON TX 77251-1562

140. WALIA ESTATES LLC
2921 N ISLAND DR
SEABROOK TX 77586-1637

141. WALIA ESTATE LLC
2921 N ISLAND DR
SEABROOK TX 77586-1637

142. WALIA ESTATES LLC
2921 N ISLAND DR
SEABROOK TX 77586-1637

143. I J W INVESTMENTS LLC
4808 FAIRMONT PKWY STE 437
PASADENA TX 77505-3722

144. I J W INVESTMENTS LLC
4808 FAIRMONT PKWY STE 437
PASADENA TX 77505-3722

145. MARTIN MARIETTA MATERIALS SOUTHWEST LTD
C/O BADEN TAX MANAGEMENT
PO BOX 8040
FORT WAYNE IN 46898-8040

146. MISSOURI PACIFIC RAILROAD COMPANY
UNION PACIFIC RAILROAD CO
1400 DOUGLAS ST STOP 1640
OMAHA NE 68179-1001

147. CANNON MELVIN E ET AL
PO BOX 34014
HOUSTON TX 77234-4014

148. A HAK INDUSTRIAL SERVICES INC
9702 GALVESTON RD
HOUSTON TX 77034-3916

1/11-D-20

149. ALJAMMALI ABDALKARIM
9801 PALMFIELD ST
HOUSTON TX 77034-3831

150. ALJAMMALI ABDALKARIM
9801 PALMFIELD ST
HOUSTON TX 77034-3831

151. ALJAMMALI ABDALKARIM
9801 PALMFIELD ST
HOUSTON TX 77034-3831

152. MUSA A ADI
9816 GALVESTON RD
HOUSTON TX 77034-3918

153. ADI MUSA A
9802 GULF FWY
HOUSTON TX 77034-1041

154. ADI MUSA A
306 TALL TIMBERS WAY
FRIENDSWOOD TX 77546-7857

155. GARZA MARIA O
12616 PALMSPRINGS DR
HOUSTON TX 77034-3859

156. MARTINEZ JOSE
15814 CRAIGHURST DR
HOUSTON TX 77059-6445

157. GARZA MARIA O
12616 PALMSPRINGS DR
HOUSTON TX 77034-3859

158. GARZA MARIN O
12913 ALMEDA GENOA RD
HOUSTON TX 77034-4635

159. ROMO MARIA O
12913 ALMEDA GENOA RD
HOUSTON TX 77034-4635

160. WHITFIELD DWIGHT
1601 HICKORY BEND LN
PEARLAND TX 77581-1625

161. PASADENA ISD
PO BOX 1318
PASADENA TX 77501-1318

162. ROBINSON EDGAR S JR & CHLOE C
13002 ALMEDA GENOA RD
HOUSTON TX 77034-4634

163. INIGUEZ MERCEDES G
9913 PALMHILL ST
HOUSTON TX 77034-4613

164. INIGUEZ FELIPE L
9914 PALMFIELD ST
HOUSTON TX 77034-4612

165. JACK & SAM INC
9900 GALVESTON RD
HOUSTON TX 77034-3920

166. HUJMUHAMMAD BADR
10002 GALVESTON RD
HOUSTON TX 77234-4616

167. HUJMUHAMMAD BADR
10002 GALVESTON RD
HOUSTON TX 77234-4616

168. HUJMUHAMMAD BADR
10002 GALVESTON RD
HOUSTON TX 77234-4616

169. CLEAR LAKE KOREAN
CHRISTIAN CHURCH
819 ISLAND MEADOW CT
HOUSTON TX 77062-2134

170. ALJAMMALI ABDALKARIM KHALIL
ELKHATIB MUSTAFA FAWZY
5326 MADISON LEE LN
PASADENA, TX 77054-3059

171. BACHIR PROPERTIES INC
11361 BEECHNUT ST
HOUSTON TX 77072-4211

172. CHRIST CHURCH (APOSTOLIC)
OF HOUSTON TX
PO BOX 34551
HOUSTON TX 77234-4551

173. VELASQUEZ NELSON
11319 WAXWOOD DR
HOUSTON TX 77089-5311

174. VELASQUEZ MARIO
11315 WAXWOOD DR
HOUSTON TX 77089-5311

175. SPRINT MANGMNT SERV LP
2141 PRESTON ST
RICHMOND TX 77469-1418

176. SCHULTZ & ACKER TRUSTS
ADDRESS UNKNOWN

177. SPRINT MANGMNT SERV LP
2141 PRESTON ST
RICHMOND TX 77469-1418

178. SPRINT MANAGEMENT SERVICES LP
2141 PRESTON ST
RICHMOND TX 77469-1418

179. 13035 GARLENDA TRUST
5724 LEBANON RD STE 144-310
FRISCO TX 75034

180. CANALES MARIA
TURCIOS DOUGLAS
13103 GARLENDA LN
HOUSTON TX 77034-3786

181. SINGH SARA
13107 GARLENDA LN
HOUSTON TX 77034-3786

182. GARCIA ALBERTO
13111 GARLENDA LN
HOUSTON TX 77034-3786

183. CORTEZ ISMAEL & ERICA
13115 GARLENDA LN
HOUSTON TX 77034-3786

184. RODRIGUEZ RAFAEL R
ROJAS PAOLA D
13119 GARLENDA LN
HOUSTON TX 77034-3786

185. SOUTHWAY HOMEOWNERS ASSOCIATION INC
2002 W GRAND PKWY N STE 100
KATY TX 77449-1964

186. RODRIGUEZ SONIA
13138 GARLENDA LN
HOUSTON TX 77034-3786

187. KENDRICK JAMES B ET AL
8577 S SIX SHOOTER CIR
SANDY UT 84093-1043

SMS MANAGEMENT LLP
1041 CONRAD SAUER DR
HOUSTON TX 77043-5201

1/11-D-25

PASADENA ISD
CAUSE #2008-35299
PO BOX 1318
PASADENA TX 77501-1318

188. GUERRERO AMADO C
13134 GARLENDA LN
HOUSTON TX 77034-3786

189. YBANEZ JUANITA R
13130 GARLENDA LN
HOUSTON TX 77034-3786

190. ELIE GILBERT
13126 GARLENDA LN
HOUSTON TX 77034-3786

191. GOMEZ ANDREW
ZADJURA STEPAHANIE
13122 GARLENDA LN
HOUSTON TX 77034-3786

192. JULES KARIM
13118 GARLENDA LN
HOUSTON TX 77034-3786

193. RAMIREZ NELLY MARIA
13114 GARLENDA LN
HOUSTON TX 77034-3786

194. CASTILLO SANTIAGO &
VILLARREAL OFELIA
13110 GARLENDA LN
HOUSTON TX 77034-3786

1/11-D-26

195. OLVERA BLENCH M
13119 KODY RIDGE CT
HOUSTON TX 77034-3792

196. DEJEAN SHELLY
13123 KODY RIDGE CT
HOUSTON TX 77034-3792

197. GARCIA MANUEL JAIME
CABELLO MOISES
13127 KODY RIDGE CT
HOUSTON TX 77034-3792

198. CASTRO JOEL
13131 KODY RIDGE CT
HOUSTON TX 77034-3792

199. GARCIA BERENICE
12303 GULF FWY APT 2105
HOUSTON TX 77034-4581

200. GONZALEZ LUIS & CHARLMANE
13139 KODY RIDGE CT
HOUSTON TX 77034-3792

201. MORALES PATRICK & NANCY L
13143 KODY RIDGE CT
HOUSTON TX 77034-3792

202. SOUTHWAY HOMEOWNERS ASSOCIATION INC
2002 W GRAND PKWY N STE 100
KATY TX 77449-1964

203. BONILLA EMMANUEL A
BONILLA JOAQUIN A
13147 KODY RIDGE CT
HOUSTON TX 77034-3792

204. MARTINEZ CARMELO & ELIZABETH
13151 KODY RIDGE CT
HOUSTON TX 77034-3792

205. VERA KRISTY M
13155 KODY RIDGE CT
HOUSTON TX 77034-3792

206. OLVERA JOEL
13159 KODY RIDGE CT
HOUSTON TX 77034-3792

207. ALMENDARES ANTONIO JR
13163 KODY RIDGE CT
HOUSTON TX 77034-3792

208. JIMINEZ VILMA &
CHANO JOFRE
13167 KODY RIDGE CT
HOUSTON TX 77034-3792

209. SHAHEED AHMAD & SALIMAH A
13235 SOUTHPOINT LN
HOUSTON TX 77034-2165

210. TRAN BINH T
13239 SOUTHPOINT LN
HOUSTON TX 77034-2165

211. VARGAS MIRNA A
13243 SOUTHPOINT LN
HOUSTON TX 77034-2165

212. RIVAS WILFREDO
RIVAS DOLORES
13247 SOUTHPOINT LN
HOUSTON TX 77034-2165

213. ADAME MIGUEL
MARTINEZ OBDULIO J & NEREIDA
13251 SOUTHPOINT LN
HOUSTON TX 77034-2165

214. MAI PHUONG X
13303 SOUTHPOINT LN
HOUSTON TX 77034-2167

215. SANCHEZ DANIEL
13307 SOUTHPOINT LN
HOUSTON TX 77034-2167

216. FERRAO MELKY M
13311 SOUTHPOINT LN
HOUSTON TX 77034-2167

217. TAYE NASIF
13315 SOUTHPOINT LN
HOUSTON TX 77034-2167

218. NOUEIRY AZIZA
13319 SOUTHPOINT LN
HOUSTON TX 77034-2167

219. ARZAGA DENISE & ABRAHAM
13323 SOUTHPOINT LN
HOUSTON TX 77034-2167

220. OPENDOOR PROPERTY TRUST I
410 N SCOTTSDALE RD STE 1600
TEMPE AZ 85281-0976

221. MOHAMMED ABDUL H
13331 SOUTHPOINT LN
HOUSTON TX 77034-2167

222. MAI TAI
13335 SOUTHPOINT LN
HOUSTON TX 77034-2167

223. QUINTANILLA LEONIDAS & AZUCENA
13339 SOUTHPOINT LN
HOUSTON TX 77034-2167

224. GARCIA GAVINO R III
13343 SOUTHPOINT LN
HOUSTON TX 77034-2167

225. ALEMAN NOHELIA
13347 SOUTHPOINT LN
HOUSTON TX 77034-2167

226. LE HAI THAI
NGUYEN UYEN THIKIM
13403 SOUTHPOINT LN
HOUSTON TX 77034-2169

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227. TAYLOR FRANK & IESHA
13407 SOUTHPOINT LN
HOUSTON TX 77034-2169

228. ANDREWS RANDELL LANDONA & KEANNA
13411 SOUTHPOINT LN
HOUSTON TX 77034

229. SOUTHWAY HOMEOWNERS ASSOCIATION INC
2002 W GRAND PKWY N STE 100
KATY TX 77449-1964

230. TA CUONG T
13306 SOUTHPOINT LN
HOUSTON TX 77034-2166

231. NGO PHAT
13310 SOUTHPOINT LN
HOUSTON TX 77034-2166

232. VEGA EDUARDO
13314 SOUTHPOINT LN
HOUSTON TX 77034-2166

233. BAILEY NATALEE
13318 SOUTHPOINT LN
HOUSTON TX 77034-2166

234. NGUYEN NAM
13322 SOUTHPOINT LN
HOUSTON TX 77034-2166

235. LOUVIERE SUSAN J
13326 SOUTHPOINT LN
HOUSTON TX 77034-2166

236. MYERS HOWARD L & CAROL A
13330 SOUTHPOINT LN
HOUSTON TX 77034-2166

237. LUU BRUCE
13334 SOUTHPOINT LN
HOUSTON TX 77034-2166

238. DOUGHERTY AMY & THOMAS M
13338 SOUTHPOINT LN
HOUSTON TX 77034-2166

239. KLAIR AMINA N
RAZA MUHAMMAD A
13342 SOUTHPOINT LN
HOUSTON TX 77034

240. RODRIGUEZ SAUL & OTILIA
13406 SOUTHPOINT LN
HOUSTON TX 77034-2168

241. FERMAN LAURA
13410 SOUTHPOINT LN
HOUSTON TX 77034-2168

242. PROGRESS RESIDENTIAL BARROWER 17 LLC
PO BOX 4090
SCOTTSDALE AZ 85261-4090

243. ALCALA RITA SERNA
13418 SOUTHPOINT LN
HOUSTON TX 77034-2168

244. TA VINH
DUONG MUI
11126 LINDEN GATE DR
HOUSTON TX 77075-2425

245. SOUTHWAY HOMEOWNERS ASSOCIATION INC
2002 W GRAND PKWY N STE 100
KATY TX 77449-1964

246. JUAREZ JOSE PABLO CASTILLO
CASTILLO JOSE PABLO JR
7803 ST CLAIR DR
PASADENA TX 77505-1437

247. TRAN QUANG KIM
13335 BABBITT ST
HOUSTON TX 77034-2173

248. ELIZALDE SHARON
13339 BABBITT ST
HOUSTON TX 77034-2173

249. RAMOS PEDRO
13343 BABBITT ST
HOUSTON TX 77034-2173

250. AVILES ALVARO S & VIRGINIA
13403 BABBITT CT
HOUSTON TX 77034-2174

251. CURRENT OWNER
PO BOX 841661
PEARLAND TX 77584-0020

252. RUEDA MARIBEL
13411 BABBITT CT
HOUSTON TX 77034-2174

253. DANG QUANG
DO KIM C
13415 BABBITT CT
HOUSTON TX 77034-2174

254. MCNEIL PATRICIA & MARK
13419 BABBITT CT
HOUSTON TX 77034-2174

255. DELEON MARIA T N
13423 BABBITT CT
HOUSTON TX 77034-2174

256. BENAVIDES HORACIO
13427 BABBITT CT
HOUSTON TX 77034-2174

257. RAMIREZ FRANCISCO
13414 BABBITT CT
HOUSTON TX 77034-2174

258. NASIR NADEEM
15402 BAY COVE CT
HOUSTON TX 77059-5820

1/11-D-34

259. HOOBLER SCOTT S
13422 BABBITT CT
HOUSTON TX 77034-2174

260. SAMANIEGO VICTORIA
ANTUNEZ ALDO
13426 BABBITT CT
HOUSTON TX 77034-2174

261. RODRIGUEZ RUSSELL & VALERIE
13430 BABBITT CT
HOUSTON TX 77034-2174

1/11-D-35