

Waste Delineation and Above Ground Vapor Survey Cumberland County/Cliffdale LF Fayetteville, North Carolina NCDEQ NCD980502900, Task 2900RI-1

PREPARED FOR

NCDEQ

North Carolina Department of Environmental Quality

Division of Waste Management – Inactive Hazardous Sites Branch

Pre-Regulatory Landfill Unit

1646 Mail Service Center

Raleigh, NC 27699

PREPARED BY:

S&ME, Inc. 3201 Spring Forest Road Raleigh, NC 27616

June 20, 2024



June 20, 2024

NCDEQ

North Carolina Department of Environmental Quality
Division of Waste Management – Inactive Hazardous Sites Branch
Pre-Regulatory Landfill Unit
1646 Mail Service Center

Raleigh, NC 27699

Attention: Ms. Analee Thornburg

Reference: Waste Delineation and Above Ground Vapor Survey

Cumberland County/Cliffdale LF

Fayetteville, North Carolina

NCDEQ ID No. NCD980502900, Task Order 2900RI-1

S&ME Project No. 23050459

Dear Ms. Thornburg:

S&ME, Inc. (S&ME), appreciates the opportunity to provide this Above Ground Vapor Surbey and Waste Delineation Assessment for remedial investigation (RI) activities at the Cumberland County/Cliffdale LF site located in Fayetteville, North Carolina as requested by Pre-Regulatory Landfill Unit. This report outlines all field activities to complete Task Order 2900RI-1 based on S&ME Proposal No. 23050459 dated February 21, 2024. These services will be performed according to the terms of Contract Number N42621-B, dated January 4, 2021, between NCDEQ and S&ME.

Sincerely,

S&ME, Inc.

Thomas Raymond, P. E., PMP Principal Engineer / Project Manager

traymond@smeinc.com

Connor Hicks, G.I.T Environmental Staff Professional connorhicks@smeinc.com

Con hik

Copy: Gerald Paul, S&ME, Inc. jpaul@smeinc.com



Fayetteville, Cumberland County, North Carolina NCDEQ ID NCD980502900, Task Order 2900RI-1

S&ME Project No. 23050459

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1.0 Summary of Current Investigation

S&ME completed the following Scope of Services listed below for this investigation in general conformance with S&ME proposal No. 23050459, dated February 21, 2024, for Task Order 2900RI-1 under the terms of Contract Number N42621-B, dated January 4, 2022, between NCDEQ and S&ME.

- Limited Site Clearing
- Waste Disposal Area (WDA) perimeter delineation (test pits and hand auger borings)
- Above Ground Vapor Survey
- Prepared and revised this report.

S&ME's services were performed in general accordance with the North Carolina Department of Environmental Quality (NCDEQ) *Guidelines for Addressing Pre-Regulatory Landfills and Dumps* (March 2022) and S&ME's approved *Standard Operating Procedures and Quality Assurance (SOP/QA) Manual (July 2010)*, previously approved by NCDEQ. A site map is depicted on **Figure 1**.

2.0 Limited Site Clearing

Prior to performing remedial investigation activities, S&ME contracted with a clearing contractor, HPC Land Services, to clear vegetation and trees along a pre-planned path in the documented waste disposal area. HPC Land Services and S&ME were on site March 12 and 13, 2024 clearing vegetation and trees to allow access for an excavator and truck to navigate the site. A path was cleared along the border of the approximate waste boundary (based upon a geophysical survey) to conduct waste delineation activities. A path on the northwest and southern border were already partially cleared before HPC arrived onsite. A photographic log documenting site activities is included as **Appendix I**.

3.0 Waste Delineation Assessment

3.1 WDA Test Pit Investigation

S&ME's subcontract test pit crew, Buckeye Elm Contracting, LLC (BEC) conducted 31 test pits (TP-1 to TP-21B) on March 18 to 21, 2024.

BEC test pit crew utilized an excavator to conduct waste delineation test pits to a maximum depth of 8 feet below ground surface (bgs). Soils were continuously logged and classified, identifying soil types according to the Unified Soil Classification System (USCS). Test pit locations and the adjusted waste boundary are depicted on **Figure 2**. **Appendix II** presents the coordinates of the boring. Boring logs are included in the field documents in **Appendix III**.

3.2 WDA Test Pit Results

Waste was occasionally encountered at the surface across the investigation area in the form of glass, wood, concrete, plastics, cloth, bricks, metal, and tires of all sizes. Waste on the western portion of the site was encountered to a depth of 2-6 feet bgs in the waste delineation test pits. The waste boundary on

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the north and northeastern part of the property follows the top edge of the ridge. Waste was found at a depth of 4-6 feet bgs on the edges of the ridge and no waste was discovered in any test pit on the side of the slope. Waste on the east side of the property was found near the wetlands at a depth of 4-6 feet. Waste was found at a depth of 3-6 feet bgs on the southern border on the top ridgeline near the clearing path overlooking the residential properties. In the southeastern area of the landfill, the edge of waste was delineated by test pits and by noting the locations of slope bottoms and edges of wetland areas. Along the southern boundary of the landfill, test pits confirmed waste delineation (TP-14 to TP-18) with no waste encountered in the southern ends of the test pits, and waste encountered in the northern ends of the test pits.

The overall extent of the buried waste extends over the entire property, which was indicated by the geophysical survey. Test pit locations and a waste boundary are depicted on **Figure 2**. **Appendix I** shows a photograph log detailing the soil and types of waste found in the test pits. **Appendix II** presents the coordinates of the boring. Boring logs are included in the field documents in **Appendix III**.

3.3 WDA Hand Auger Borings and Results

On June 13, 2024, S&ME field personnel returned to Cliffdale Landfill to confirm the test pit findings with the use of hand auger borings in specific locations shown on **Figure 2**. Waste was found in SB-1A and SB-2A located on the top of the ridge in the northern portion of the property. SB-1B and SB-2B were offset down slope and no waste were found in either boring. SB-3 and SB-4 were located on the crest of the slope leading down to the wetlands. No waste was discovered up to a depth of 5 ft bgs in each of those borings. SB-5 is located on the southeast boundary of the property. No waste was found in the boring, but groundwater was encountered at a depth of 3-5 ft bgs. SB-6 and SB-7 were located on the southern boundary of the property on the crest of slopes leading down to residential properties. No waste was found in either boring. The hand auger WDA confirmed the waste boundary depicted by the test pits. Hand auger locations and the waste boundary limits are depicted on **Figure 2**. **Appendix I** shows a photograph log detailing the soil and types of waste found in the hand auger borings. **Appendix II** presents the coordinates of the boring. Boring logs are included in the field documents in **Appendix III**.

4.0 Above Ground Vapor Survey

4.1 Field Screening Methods

On April 8-11, 2024, S&ME completed the above ground survey by collecting 287 (plus four background quality control) individual vapor screening readings from a 100-foot grid pattern over the WDA.

The above ground vapor survey was conducted by using portable meters to collect the following parameters at each above ground sampling location:

- Landfill Gas Meter GEM5000 PLUS (or equivalent) for:
 - Methane: 0-100%, +/- 0.5% to 1.5% accuracy
 - hydrogen sulfide: 0-500 parts per million-volume (ppm-v), with +/- 10 ppm-v accuracy
 - carbon dioxide: 0-100%, +/- 0.5% to 1.5% accuracy
 - oxygen: 0-25%, +/- 1.0% accuracy

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- barometric pressure: +/- 14.7 inches mercury from calibration pressure, +/- 1% inches mercury accuracy
- Photo-Ionization Detector (PID) MiniRAE 3000 for total VOCs: 0-15,000 parts per million volume in air (ppm-v), with +/- 0.1 ppm-v resolution over range of 0 to 999.9 ppm-v and +/- 1 ppm-v resolution over range of 1,000 to 15,000 ppm-v.

Each of the meters listed above has an internal pump, which was used to draw air samples from approximately six inches above the ground surface through the portable meters. Prior to and following the above ground screenings, S&ME collected readings from four ambient air, background locations. Upon completion of the above ground vapor screening, S&ME collected two duplicate quality control readings. Stable readings were recorded at each sample location.

A thermohygrometer was used throughout the screening event to measure ambient air for humidity and temperature. Above Ground Vapor Results were as follows:

Methane

Methane was not detected at any of the above ground screening locations or in in the ambient air background screening locations.

Hydrogen Sulfide

Hydrogen Sulfide was not detected at any of the above ground screening locations or in in the ambient air background screening locations.

Volatile Organic Compounds

VOCs were not detected at any of the above ground screening locations or in in the ambient air background screening locations.

The above ground vapor survey readings are included in the field documents in Appendix IV.

5.0 Quality Control

Quality control samples were collected and analyzed as follows:

- <u>Duplicates:</u> two duplicate vapor readings were recorded for each field day during the above ground vapor survey. The relative percent differences between the record samples and the duplicate samples are within an acceptable quality control range.
- <u>Background Samples:</u> four locations and eight vapor readings were recorded for each field day during the above ground vapor survey. The relative percent differences between the record samples and the background samples are within an acceptable quality control range.

6.0 Deviations From the Work Plan

On June 13, 2024, S&ME field personnel returned to Cliffdale Landfill to confirm test pit findings with the use of hand auger borings in specific locations. Hand auger borings were not include in the Work Plan.

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7.0 Sole Use Statement

This report is solely intended for use by NCDEQ for the services that were performed in accordance with S&ME's Proposal No. 23050459, dated February 21, as authorized by NCDEQ Task Order 2900RI-1.

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8.0 Certification Acknowledgement

Thomas P. Raymond/ S&ME, Inc.

"I certify that to the best of my knowledge, after thorough investigation, the information contained in or accompanying this certification is true, accurate, and complete."

| Name of Environmental Consultant / Company |
|--|
| Signature of Environmental Consultant June 20, 2024 Date |
| I, EJOUL KILLEVE Na Notary Public of said County and State, do hereby certify that |
| homas P. Raymonddid personally appear and sign before me this day, produced proper identification |
| in the form of, was duly sworn or affirmed, and declared that, he or she is the duly |
| authorized environmental consultant referenced above and that, to the best of his or her knowledge and belief, |
| after thorough investigation, the information contained in the above certification is true and accurate, and he or |
| she then signed this Certification in my presence. |

WITNESS my hand and official seal this 20th day of Uune 2024.

Notary Public (signature)

My commission expires: 7 26.2020

(OFFICIAL SEAL)

O7-26-2026

OBLICATION

COUNTY

MANAGEMENT

COUNTY

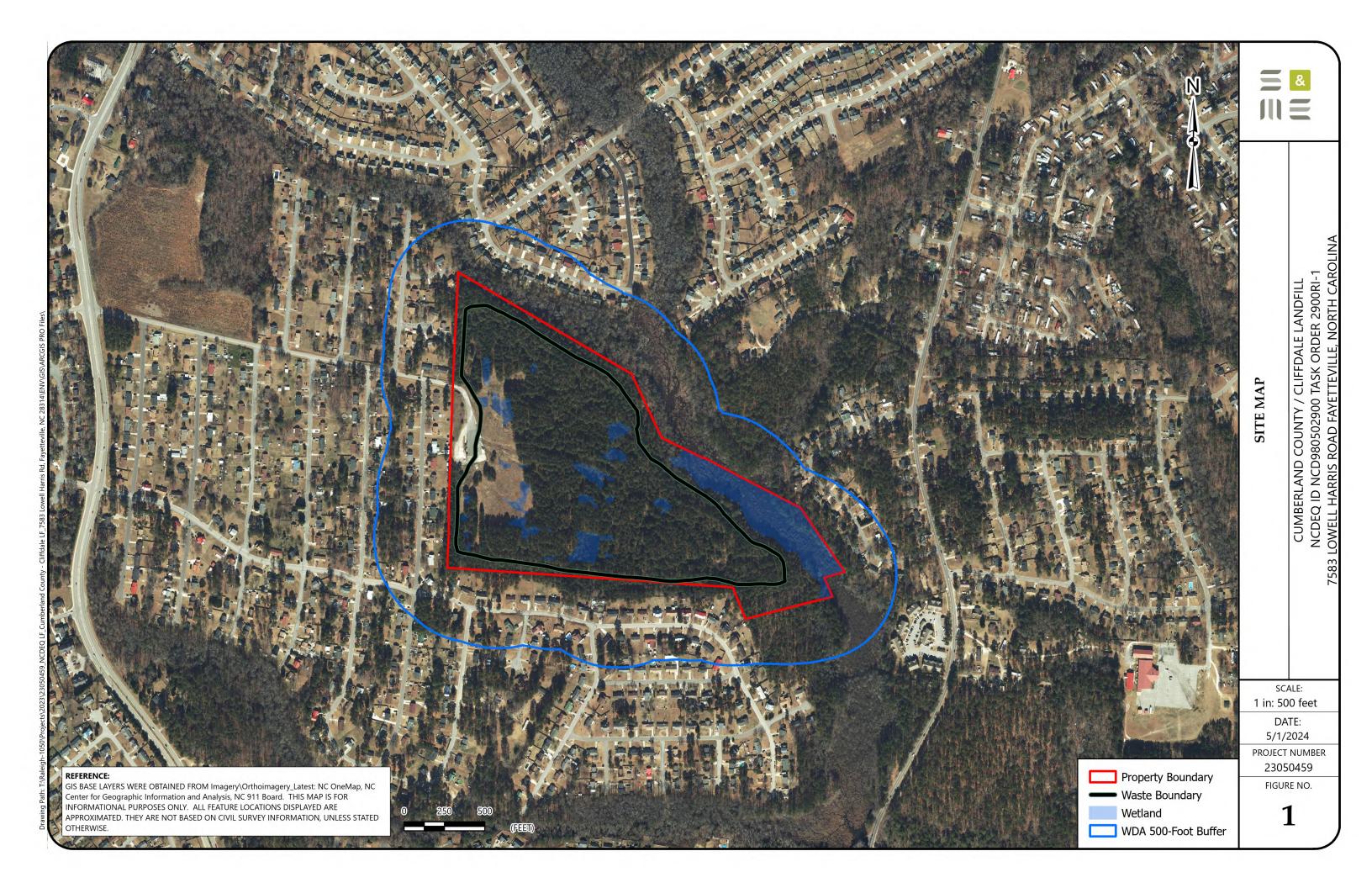
MANAGEMENT

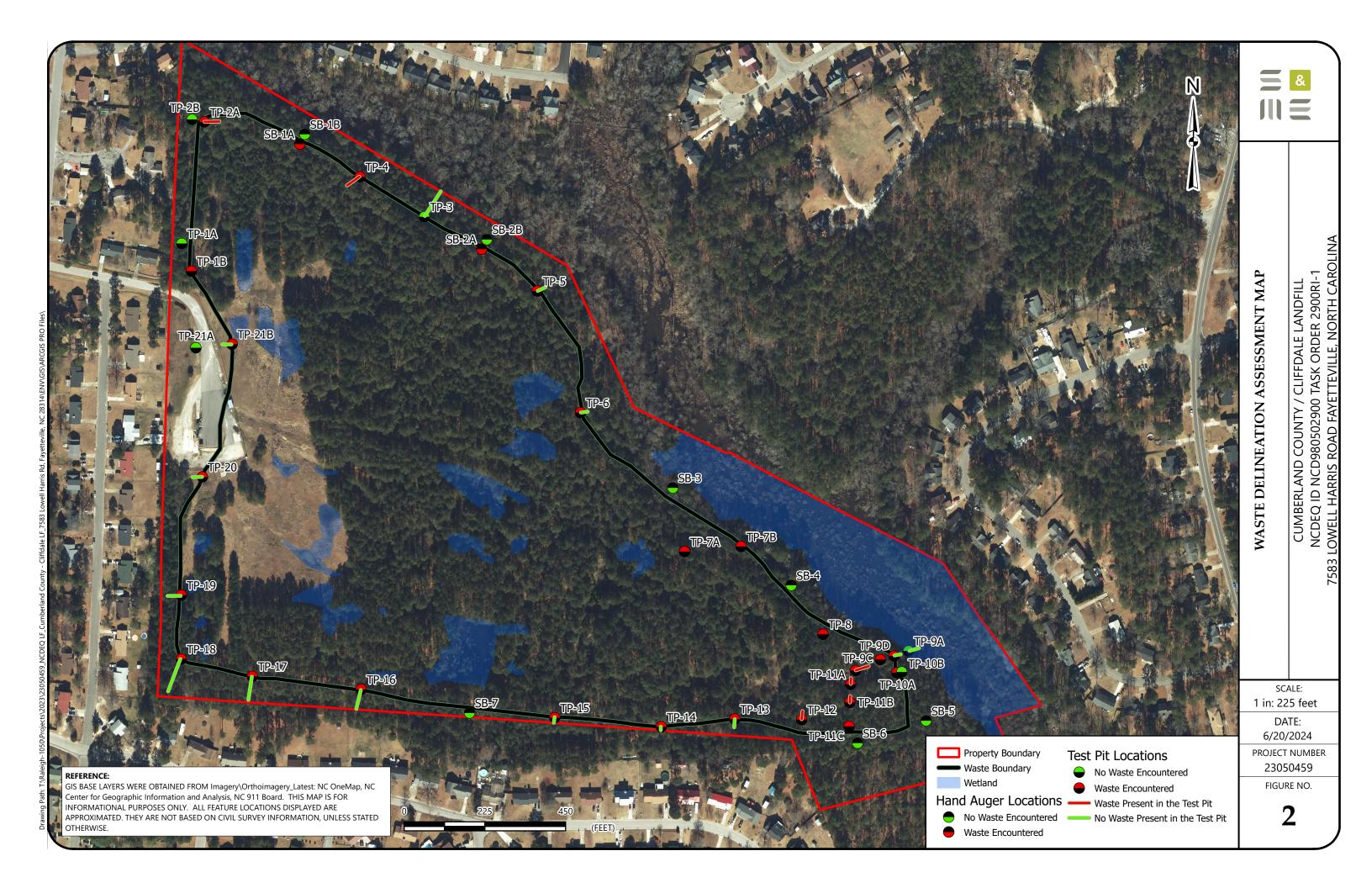
MANAGEMENT

COUNTY

MANAGEMENT

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| | | | Photographer: Connor Hicks 3/18/2024 |
|---|------------------------|---|--------------------------------------|
| 1 | Location / Orientation | TP-1A | |
| 1 | Remarks | Trench terminated at a depth of 6 feet, no waste encountered. | |
| | | | Photographer: Connor Hicks 3/18/2024 |
| 2 | Location / Orientation | TP-1B | |
| | Remarks | Waste at a depth of 4 to 6 feet. | |



| | | | 3/18/2024 |
|----|------------------------|---|----------------------------|
| | | | Photographer: Connor Hicks |
| 3 | Location / Orientation | TP-2A | |
| 3 | Remarks | Waste at depth of 3 feet throughout the trench. | |
| | | | 3/18/2024 |
| | | | Photographer: Connor Hicks |
| 4 | Location / Orientation | TP-2B | |
| -1 | Remarks | No waste. Test Pit terminated at a depth of 5 feet. | |



| | | | Photographer: Connor Hicks 3/18/2024 |
|-----------------------------|------------------------|---|--------------------------------------|
| 5 | Location / Orientation | TP-3 | |
| J | Remarks | No waste found throughout trench on northern slop | e. |
| | | | Photographer: Connor Hicks 3/18/2024 |
| Location / Orientation TP-4 | | | |
| 6 | Remarks | Waste at a depth of 4 to 6 feet opposite the excavator waste found next to excavator. | or, no |

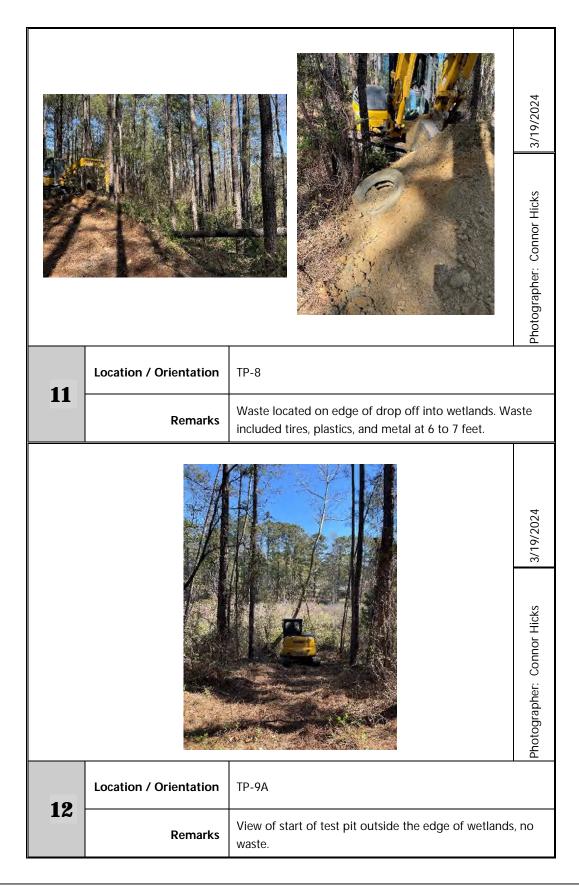


| | | | Photographer: Connor Hicks 3/18/2024 |
|-----------------------------|------------------------|---|--------------------------------------|
| 7 | Location / Orientation | TP-5 | |
| | Remarks | Waste at a depth of 4 to 5 feet at the start of the tes No waste was found as the pit extended down the sl | |
| | | | Photographer: Connor Hicks 3/19/2024 |
| Location / Orientation TP-6 | | TP-6 | |
| 8 | Remarks | Waste at a depth of 7 feet as the test pit moved up so no initial waste at start of test pit | slope, |



| | | | Photographer: Connor Hicks 3/19/2024 |
|----|------------------------|--|--------------------------------------|
| 9 | Location / Orientation | TP-7A | |
| | Remarks | Waste at a depth of 4 feet at top of slope. | |
| | | | Photographer: Connor Hicks 3/19/2024 |
| 10 | Location / Orientation | TP-7B | |
| 10 | Remarks | Waste at a depth of 6 to 7 feet before drop off into wetlands. | |







| | And the second s | | Photographer: Connor Hicks 3/19/2024 |
|------------------------------|--|--|--------------------------------------|
| 13 | Location / Orientation | TP-9B | |
| 13 | Remarks | View of waste at a depth of 3 feet which includes lots plastics. | s of |
| | | | Photographer: Connor Hicks 3/19/2024 |
| Location / Orientation TP-9C | | | |
| 14 | Remarks | View of test pit location. Waste at a depth of 3 feet. | |

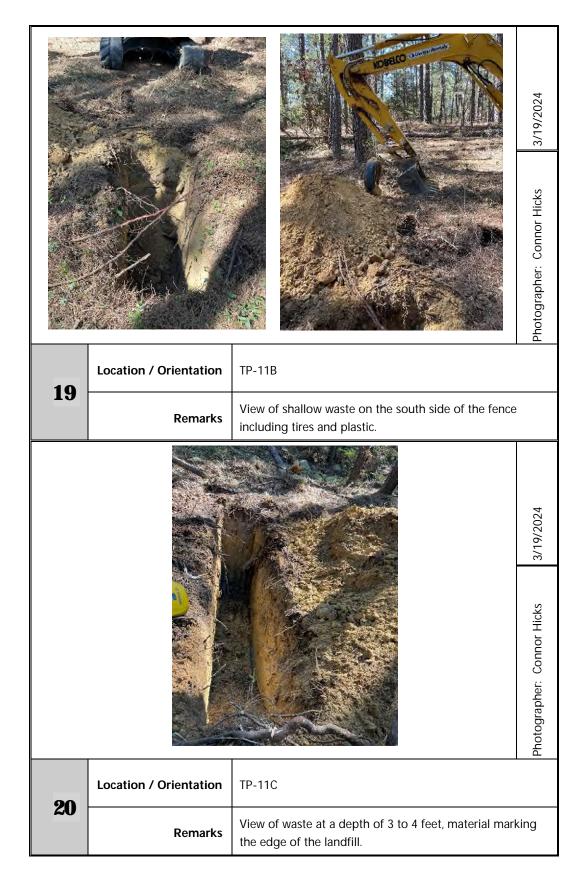


| | | | Photographer: Connor Hicks 3/19/2024 |
|----|------------------------|---|--------------------------------------|
| 15 | Location / Orientation | TP-9D | |
| 15 | Remarks | View of test pit with no waste at the start but waste of under the excavator at a depth of 5 feet, marking the of the landfill. | |
| | | | Photographer: Connor Hicks 3/19/2024 |
| 16 | Location / Orientation | TP-10A | |
| 10 | Remarks | View of waste at 2 to 3 feet. Waste includes cloths ar plastics. | nd |



| | | | 3/19/2024 |
|----|------------------------|--|--------------------------------------|
| | | | Photographer: Connor Hicks |
| 17 | Location / Orientation | TP-10B | |
| | Remarks | View of test pit with no waste, marking the edge of t landfill on the southeastern boarder. | he |
| | | | Photographer: Connor Hicks 3/19/2024 |
| | | | Photographe |
| 10 | Location / Orientation | TP-11A | |
| 18 | Remarks | View of waste at a depth of 4 ft next to small fence li which includes metal and plastic. | ne |

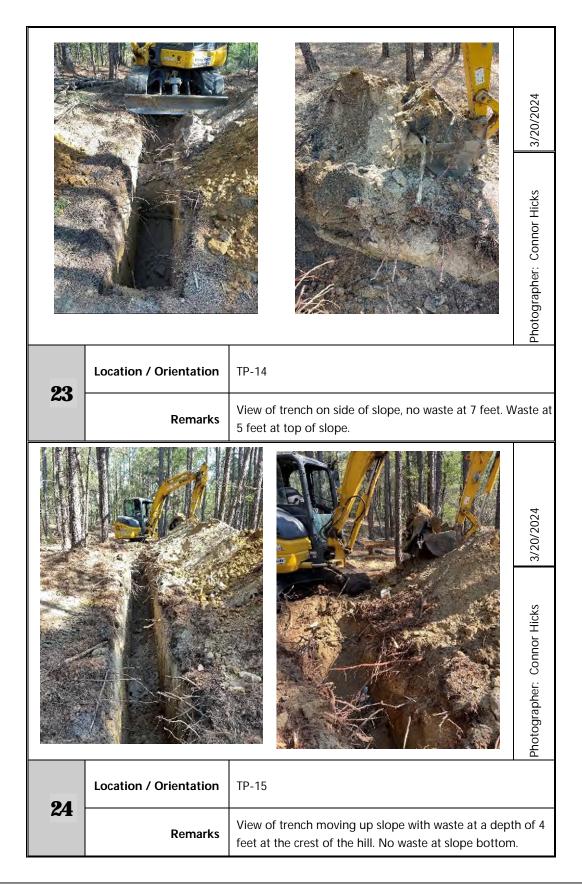




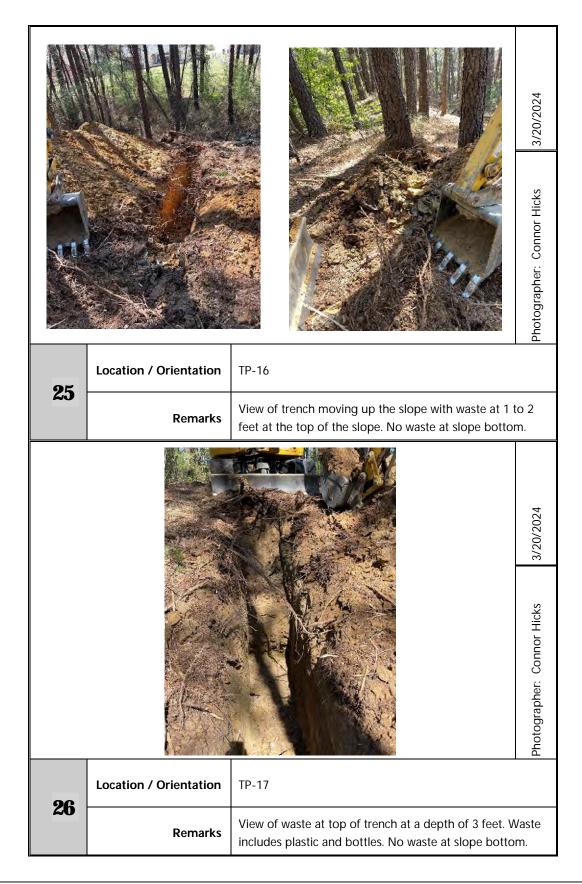












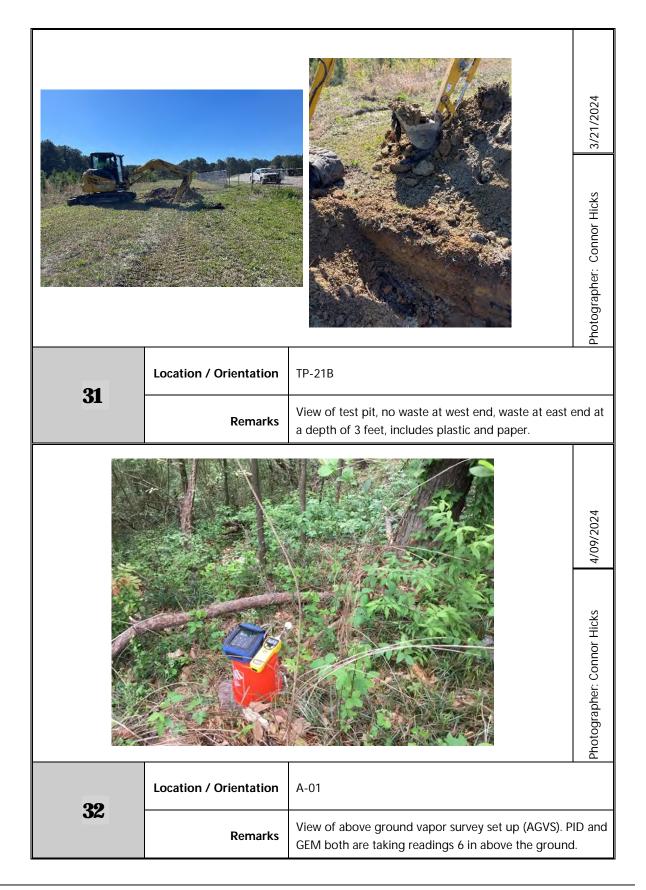


| | | | Photographer: Connor Hicks 3/20/2024 |
|----|------------------------|--|--------------------------------------|
| 27 | Location / Orientation | TP-18 | |
| | Remarks | View of trench moving up the slope. Waste was at the at a depth of 6 feet. No waste at the bottom of the s | |
| | | | Photographer: Connor Hicks 3/20/2024 |
| 28 | Location / Orientation | TP-19 | |
| 20 | Remarks | View of test pit on western border, waste at a depth feet on east end. No waste on west end. | of 5 |











| | | | 4/08/2024 |
|-----------------------------|------------------------|---|----------------------------|
| | | | Photographer: Connor Hicks |
| 33 | Location / Orientation | BG-04 | |
| 33 | Remarks | View of AGVS background set up located on Tine Ro | ad. |
| | | | 4/09/2024 |
| | | | Photographer: Connor Hicks |
| Location / Orientation I-03 | | | ъ. |
| 34 | Remarks | View of AGVS located next to a pocket wet area. | |



| | | | Photographer: Connor Hicks 4/10/2024 |
|----|------------------------|---|--------------------------------------|
| 35 | Location / Orientation | K-10 | |
| | Remarks | View of AGVS next to another pocket wet area, no detections above background. | |
| | | | Photographer: Connor Hicks 4/08/2024 |
| 00 | Location / Orientation | T-20 | <u> </u> |
| 36 | Remarks | View of AGVS on former test pit location, no detection above background. | ons |



| | | | Photographer: Connor Hicks 6/13/2024 |
|----|------------------------|--|--------------------------------------|
| 37 | Location / Orientation | SB-1A | |
| | Remarks | View of SB-1A with plastic waste at a depth of 5 ft on the south side of the cleared path. | |
| | | | Photographer: Connor Hicks 6/13/2024 |
| 20 | Location / Orientation | SB-1B | <u> </u> |
| 38 | Remarks | View of SB-1B with no waste on the north side of the cleared path. | Ż |



| | | | Photographer: Connor Hicks 6/13/2024 |
|----|------------------------|--|--------------------------------------|
| 39 | Location / Orientation | SB-2A | Ph |
| | Remarks | View of SB-2A in the center of the cleared path. Waste was found at a depth of 4-5 ft. | |
| | | | 6/13/2024 |
| | | | Photographer: Connor Hicks |
| | Location / Orientation | SB-2B | |
| 40 | Remarks | View of SB-2B on the north side of the cleared path waste on the downslope. | with no |



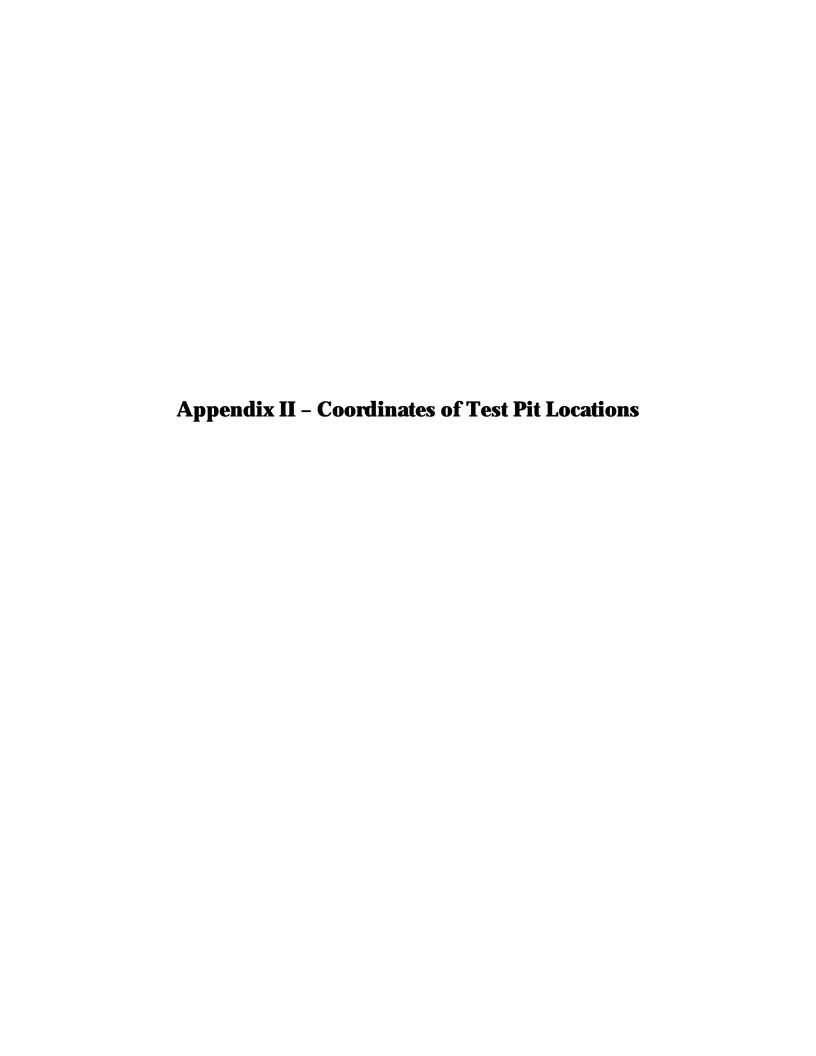
| | | | Photographer: Connor Hicks 6/13/2024 |
|----|------------------------|--|--------------------------------------|
| 41 | Location / Orientation | SB-3 | |
| 41 | Remarks | View of SB-3 on the eastern slope by the wetlands, no waste was found in the boring. | |
| | | | or Hicks 6/13/2024 |
| | | | Photographer: Connor Hicks |
| 42 | Location / Orientation | SB-4 | |
| 46 | Remarks | View of SB-4 on the eastern slope by the wetlands, n waste was found in the boring. | 0 |



| | | | Photographer: Connor Hicks 6/13/2024 |
|----|------------------------|---|--------------------------------------|
| 43 | Location / Orientation | SB-5 | |
| | Remarks | View of SB-5 in the southeast corner of the property. waste was found but groundwater was found at 5 ft | |
| | | | Photographer: Connor Hicks 6/13/2024 |
| | Location / Orientation | SB-6 | |
| 44 | Remarks | View of SB-6 south of the culvert, no waste was foun the boring. | d in |



| | | nor Hicks 6/13/2024 | |
|----|------------------------|--|----------------------------|
| | | | Photographer: Connor Hicks |
| AE | Location / Orientation | SB-7 | |
| 45 | Remarks | View of SB-7 on the south side of the property, no w was found on the slope. | aste |



APPENDIX II



Coordinates of Selected Features Cumberland County/Cliffdale LF NCDEQ ID NCD980502900 Fayetteville, Cumberland County, North Carolina S&ME Project No. 23050459, Task Order 2900RI-1

| Comple ID | Tyme | Location | | | |
|-----------|------------|--------------|-------------|-------------|-------------|
| Sample ID | Туре | Latitude | Longitude | Northing | Easting |
| TP-1A | Test Pit | -79.05678506 | 35.04440074 | 471092.8625 | 1983004.052 |
| TP-1B | Test Pit | -79.0566964 | 35.0441892 | 471015.862 | 1983030.546 |
| TP-2A | Test Pit | -79.05657447 | 35.04533168 | 471431.6311 | 1983067.275 |
| TP-2B | Test Pit | -79.05668957 | 35.04535056 | 471438.5199 | 1983032.832 |
| TP-3 | Test Pit | -79.05452514 | 35.04460653 | 471167.3791 | 1983680.496 |
| TP-4 | Test Pit | -79.05512547 | 35.04491229 | 471278.7535 | 1983500.878 |
| TP-5 | Test Pit | -79.05347339 | 35.04403805 | 470960.3158 | 1983995.176 |
| TP-6 | Test Pit | -79.05306931 | 35.04310703 | 470621.4208 | 1984115.938 |
| TP-7A | Test Pit | -79.05210066 | 35.04204342 | 470234.1788 | 1984405.658 |
| TP-7B | Test Pit | -79.05157391 | 35.04208252 | 470248.3284 | 1984563.327 |
| TP-8 | Test Pit | -79.05081035 | 35.04141078 | 470003.74 | 1984791.744 |
| TP-9A | Test Pit | -79.05001337 | 35.04128337 | 469957.2479 | 1985030.268 |
| TP-9B | Test Pit | -79.05050628 | 35.0411332 | 469902.6706 | 1984882.707 |
| TP-9C | Test Pit | -79.05027672 | 35.04121661 | 469932.9914 | 1984951.434 |
| TP-9D | Test Pit | -79.05014842 | 35.04124443 | 469943.0984 | 1984989.84 |
| TP-10A | Test Pit | -79.05012133 | 35.04111669 | 469896.6063 | 1984997.926 |
| TP-10B | Test Pit | -79.0501214 | 35.04111675 | 469896.611 | 1984997.933 |
| TP-11A | Test Pit | -79.05055349 | 35.04102765 | 469864.2642 | 1984868.557 |
| TP-11B | Test Pit | -79.05056016 | 35.04088879 | 469813.7292 | 1984866.536 |
| TP-11C | Test Pit | -79.0505668 | 35.04070549 | 469747.0233 | 1984864.514 |
| TP-12 | Test Pit | -79.05100866 | 35.04075723 | 469765.9196 | 1984732.266 |
| TP-13 | Test Pit | -79.05163167 | 35.04076139 | 469767.5295 | 1984545.79 |
| TP-14 | Test Pit | -79.05231613 | 35.04070069 | 469745.5463 | 1984340.907 |
| TP-15 | Test Pit | -79.0533087 | 35.04077096 | 469771.2801 | 1984043.829 |
| TP-16 | Test Pit | -79.05511199 | 35.04098677 | 469850.1143 | 1983504.118 |
| TP-17 | Test Pit | -79.05612507 | 35.04108628 | 469886.4994 | 1983200.909 |
| TP-18 | Test Pit | -79.05678744 | 35.04121916 | 469934.9727 | 1983002.679 |
| TP-19 | Test Pit | -79.05678733 | 35.04170805 | 470112.8953 | 1983002.813 |
| TP-20 | Test Pit | -79.05659211 | 35.04261348 | 470442.3818 | 1983061.433 |
| TP-21A | Test Pit | -79.05665358 | 35.04360211 | 470802.1895 | 1983043.241 |
| TP-21B | Test Pit | -79.05631592 | 35.04363004 | 470812.2964 | 1983144.31 |
| SB-1A | Hand Auger | -79.05568577 | 35.04516289 | 471370.0493 | 1983333.229 |
| SB-1B | Hand Auger | -79.05563999 | 35.04523789 | 471397.3366 | 1983346.948 |
| SB-2A | Hand Auger | -79.05399199 | 35.04435874 | 471077.1118 | 1983840.018 |
| SB-2B | Hand Auger | -79.0539435 | 35.04443252 | 471103.9537 | 1983854.546 |
| SB-3 | Hand Auger | -79.05220952 | 35.04253138 | 470411.7854 | 1984373.169 |
| SB-4 | Hand Auger | -79.0511064 | 35.04178561 | 470140.2007 | 1984703.203 |
| SB-5 | Hand Auger | -79.04984995 | 35.04074919 | 469762.8166 | 1985079.087 |
| SB-6 | Hand Auger | -79.05048796 | 35.04057751 | 469700.4328 | 1984888.087 |
| SB-7 | Hand Auger | -79.05410235 | 35.04080678 | 469784.4415 | 1983806.283 |





TEST PIT LOG Project Name: Cliffdale Landfill Test Pits

S&ME Job No. 23050459 Task Order 2900RI-1

Subcontracor: Buckeye Elm

Boring Number: TP-1A **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date:** 3/18/2024

Total Depth: 6 ft

| | STRATIFICATION | | | |
|--------------|----------------|---|--|--|
| Depth (Feet) | | g up · ·· | | |
| From | To | Soil Description | | |
| TP-1A | | | | |
| 0.0 | 6.0 | Brown silty sand with gray clays mixed throughout with no waste | | |

Boring Number: TP-1B **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date:** 3/18/2024

Total Depth: 6 ft

| | STRATIFICATION | | | |
|--------------|----------------|---|--|--|
| Depth (Feet) | | Soil Description | | |
| From | To | Soil Description | | |
| TP-1B | | | | |
| 0.0 | 4.0 | Brown silty sand with rocks mixed throughout, no waste | | |
| 4.0 | 6.0 | Waste found at a depth of 4 ft (doll parts, plastic, bottles) | | |

Boring Number: TP-2A **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/18/2024

Total Depth: 3 ft

| | STRATIFICATION | | | |
|--------------|----------------|-----------------------------------|--|--|
| Depth (Feet) | | G-21D | | |
| From | То | Soil Description | | |
| | TP-2A | | | |
| 0.0 | 2.0 | Brown silty sand with no waste | | |
| | | Waste found throughout at a depth | | |
| 2.0 | 3.0 | of 3 ft (bottles, burnt wood, | | |
| | | plastics, paper) | | |



Sampling Personnel: Connor Hicks **Date Drilled:** 3/18/2024

Total Depth: 5 ft

| | STRATIFICATION | | |
|--------------|----------------|---|--|
| Depth (Feet) | | Call Danasin Alam | |
| From | To | Soil Description | |
| TP-2B | | | |
| 0.0 | 5.0 | Brown silty sand with black organics mixed throughout, no waste | |

Boring Number: TP-3 **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/18/2024 **Total Depth:** 6 ft

| | STRATIFICATION | | | |
|--------------|----------------|--|--|--|
| Depth (Feet) | | Sail Degenintian | | |
| From | To | Soil Description | | |
| TP-3 | | | | |
| 0.0 | 3.0 | Lighter brown silty sand with no waste | | |
| 3.0 | 6.0 | Gray/tan silty sand with no waste | | |



Boring Number: TP-4 **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/18/2024

Total Depth: 7 ft

| | STRATIFICATION | | | |
|--------------|----------------|-----------------------------|--|--|
| Depth (Feet) | | Sail Degamention | | |
| From | To | Soil Description | | |
| | TP-4 | | | |
| 0.0 | 2.0 | Brown silty clays, no waste | | |
| 2.0 | 4.0 | Brown silty clays, no waste | | |
| 4.0 | 7.0 | Waste: plastics | | |



Sampling Personnel: Connor Hicks **Date Drilled:** 3/18/2024

Total Depth: 5 ft

| STRATIFICATION | | | |
|----------------|--------------------------|-----------------------------------|--|
| Depth (Feet) | | Soil Description | |
| From | From To Soil Description | | |
| | TP-5 | | |
| 2.0 | 4.0 | Brown silty sand, no waste | |
| 4.0 | 5.0 | Waste: plastics and glass bottles | |

Boring Number: TP-6 **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/19/2024 **Total Depth:** 7 ft

| | STD. | STRATIFICATION | | | |
|--------------|------|----------------------------|--|--|--|
| | SIK | ATIFICATION | | | |
| Depth (Feet) | | Soil Description | | | |
| From | To | Soil Description | | | |
| | TP-6 | | | | |
| 0.0 | 2.0 | Brown silty sand, no waste | | | |
| 2.0 | 4.0 | Brown silty sand, no waste | | | |
| 4.0 | 7.0 | gray clay soils, no waste | | | |
| 7.0 | 7.0 | Plastic waste | | | |



Boring Number: TP-7A **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/19/2024

Total Depth: 5 ft

| | STRATIFICATION | | | |
|------|----------------|-------------------------------|--|--|
| Dept | Depth (Feet) | | | |
| From | To | Soil Description | | |
| | TP-7A | | | |
| 0.0 | 4.0 | Brown silty sand | | |
| 4.0 | 5.0 | Waste: plastics, paper, metal | | |



Boring Number: TP-7B **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/19/2024

Total Depth: 7 ft

| | STRATIFICATION | | | |
|--------------|----------------|---|--|--|
| Depth (Feet) | | Sail Dagarintian | | |
| From | To | Soil Description | | |
| TP-7B | | | | |
| 0.0 | 3.0 | Brown silty sand with some gray clays mixed in , no waste | | |
| 3.0 | 6.0 | Brown silty sand with some gray clays mixed in , no waste | | |
| 6.0 | 7.0 | Waste: Plastics | | |

Boring Number: TP-8 **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/19/2024 **Total Depth:** 7 ft

| | STRATIFICATION | | | |
|--------------|----------------|--------------------------------|--|--|
| Depth (Feet) | | Call Danamin 4 and | | |
| From | To | Soil Description | | |
| | TP-8 | | | |
| 0.0 | 2.0 | Tan silty sand, no waste | | |
| 2.0 | 4.0 | Tan silty sand, no waste | | |
| 4.0 | 6.0 | Tan silty sand, no waste | | |
| 6.0 | 7.0 | Waste: Plastics, bottles, wood | | |

Boring Number: TP-9A **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/19/2024

Total Depth: 7 ft

| | STRATIFICATION | | |
|--------------|----------------|----------------------------|--|
| Depth (Feet) | | Sail Dagarintian | |
| From | То | Soil Description | |
| TP-9A | | | |
| 0.0 | 2.0 | Brown silty sand, no waste | |
| 2.0 | 4.0 | Brown silty sand, no waste | |
| 4.0 | 6.0 | Tan silty sand, no waste | |
| 6.0 | 7.0 | Gray moist clays, no waste | |

Boring Number: TP-9B **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/19/2024

Total Depth: 4 ft

| STRATIFICATION | | | |
|----------------|--------------|----------------------------|--|
| Dept | Depth (Feet) | | |
| From | To | Soil Description | |
| | TP-9B | | |
| 0.0 | 3.0 | Brown silty sand, no waste | |
| 3.0 | 4.0 | Waste: paper, plastics | |

Boring Number: TP-9C **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/19/2024

Total Depth: 3 ft

| STRATIFICATION | | | |
|----------------|-------|------------------------|--|
| Depth (Feet) | | Sail Dagawindian | |
| From | To | Soil Description | |
| | TP-9C | | |
| 0.0 | 3.0 | Brown silty sand | |
| | | | |
| 3.0 | 4.0 | Waste: paper, plastics | |



Boring Number: TP-9D **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/19/2024

Total Depth: 5 ft

| | STRATIFICATION | | |
|--------------|----------------|----------------------------|--|
| Depth (Feet) | | | |
| From | To | Soil Description | |
| | TP-9D | | |
| 0.0 | 2.0 | Brown silty sand, no waste | |
| 2.0 | 5.0 | Brown silty sand, no waste | |
| 5.0 | 6.0 | Waste: paper, plastics | |



Boring Number: TP-10A **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/19/2024

Total Depth: 3 ft

| | STRATIFICATION | | |
|--------------|----------------|---|--|
| Depth (Feet) | | Soil Description | |
| From | To | Soil Description | |
| | TP-10A | | |
| 0.0 | 2.0 | Brown silty sand | |
| 2.0 | 3.0 | Waste: plastics, paper, metal and cloth | |

Boring Number: TP-10B **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks
Date Drilled: 3/19/2024
Total Depth: 6 ft

| STRATIFICATION | | |
|----------------|-----|---------------------------------|
| Depth (Feet) | | Soil Description |
| From | To | Soil Description |
| TP-10B | | |
| 0.0 | 2.0 | Brown/gray silty sand, no waste |
| 2.0 | 4.0 | Brown/gray silty sand, no waste |
| 4.0 | 6.0 | Brown/gray silty sand, no waste |

Boring Number: TP-11A **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/19/2024

Total Depth: 7 ft

| | STRATIFICATION | | |
|--------------|----------------|--------------------------------|--|
| Depth (Feet) | | Call Daniel Car | |
| From | To | Soil Description | |
| | TP-11A | | |
| 0.0 | 2.0 | Brown/tan silty sand, no waste | |
| 2.0 | 4.0 | Brown/tan silty sand, no waste | |
| 4.0 | 5.0 | Waste found included paper, | |
| | 5.0 | plastics | |

Boring Number: TP-11B **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/19/2024 **Total Depth:** 5 ft

| | STRATIFICATION | | |
|--------------|----------------|--|--|
| Depth (Feet) | | G-21 D | |
| From | To | Soil Description | |
| | TP-11B | | |
| 0.0 | 3.0 | Brown/tan silty sand, no waste | |
| 3.0 | 4.0 | Waste found included paper, plastics, and a tire | |

Boring Number: TP-11C **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks
Date Drilled: 3/19/2024
Total Depth: 5 ft

| | STRATIFICATION | | |
|------|----------------|---|--|
| Dept | th (Feet) | C-11 D | |
| From | То | Soil Description | |
| | | TP-11C | |
| 0.0 | 1.0 | Brown silty sand with shallow waste, could be surface/runnoff waste | |
| 1.0 | 4.0 | Brown gray silty sand with large stones, no waste | |
| 4.0 | 5.0 | Waste found included plastic liner, could be edge of waste | |



Boring Number: TP-12 **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/20/2024

Total Depth: 7 ft

| 10th Depth. 7 ft | | | |
|------------------|----------------|-----------------------------------|--|
| | STRATIFICATION | | |
| Depth (Feet) | | Sail Dagawintian | |
| From | To | Soil Description | |
| TP-12 | | | |
| 0.0 | 2.0 | Brown silty sand, no waste | |
| 2.0 | 4.0 | Brown silty sand, no waste | |
| 4.0 | 6.0 | Brown silty sand with gray clays, | |
| | 7.0 | Waste found includes tires, wood, | |
| 6.0 | | plastics near edge of rock | |
| | | boundary, lining up with the edge | |
| | | of TP-11C | |

Boring Number: TP-13 **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks
Date Drilled: 3/20/2024

Total Depth: 7 ft

| 1 | | | | |
|--------------|----------------|---------------------------------|--|--|
| | STRATIFICATION | | | |
| Depth (Feet) | | Call Danasin Alam | | |
| From | To | Soil Description | | |
| TP-13 | | | | |
| 0.0 | 2.0 | Brown silty sand, no waste at | | |
| | | bottom of slope | | |
| 2.0 | 4.0 | Brown/tan silty sands, no waste | | |
| 4.0 | 7.0 | Brown/tan silty sands, no waste | | |
| 5.0 | 6.0 | Waste found at top of slope | | |
| | | including different plastics | | |



Boring Number: TP-14 **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/20/2024

Total Depth: 7 ft

| | STRATIFICATION | | |
|------|----------------|-----------------------------------|--|
| Dept | th (Feet) | Call Daniel Car | |
| From | То | Soil Description | |
| | TP-14 | | |
| 0 | 2 | Waste at a 2 ft, moved down slope | |
| 0.0 | 2.0 | tan brown silty sand, no waste | |
| 2.0 | 4.0 | Brown silty sand, no waste | |
| 4.0 | 6.0 | Brown silty sand, no waste | |
| 6.0 | 7.0 | Gray clays, no waste | |

Boring Number: TP-15 **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/20/2024

Total Depth: 6 ft

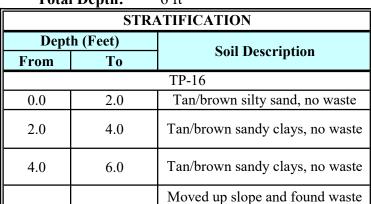
| | STRATIFICATION | | |
|------|----------------|---|--|
| Dept | th (Feet) | Soil Description | |
| From | To | Soil Description | |
| | | TP-15 | |
| 0.0 | 2.0 | Tan/brown silty sand with some clays at bottom of slope | |
| 2.0 | 4.0 | Tan/brown silty sand with some clays at bottom of slope | |
| 4.0 | 6.0 | Tan/brown silty sand with some clays at bottom of slope | |
| 4.0 | 5.0 | Waste found after moving up slope which included tires and plastics | |



Boring Number: TP-16 **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/20/2024

Total Depth: 6 ft





which included bottles, cans, and

plastics

Sampling Personnel: Connor Hicks **Date Drilled:** 3/20/2024

Total Depth: 6 ft

2.0

1.0

| | STRATIFICATION | | |
|------|----------------|--|--|
| Dept | th (Feet) | Sail Description | |
| From | To | Soil Description | |
| | | TP-17 | |
| 0.0 | 2.0 | Brown silty sand, no waste | |
| 2.0 | 4.0 | Brown silty sand and gray clays mixed in, no waste | |
| 4.0 | 6.0 | Brown silty sand and gray clays mixed in, no waste | |
| 3.0 | 4.0 | Moved up slope and found waste which included newspapers, metals, and plastics | |



Boring Number: TP-18 **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/20/2024

Total Depth: 7 ft

| | STRATIFICATION | | |
|-------|----------------|--|--|
| Dept | th (Feet) | G-21D | |
| From | То | Soil Description | |
| TP-18 | | | |
| 0.0 | 2.0 | Brown silty sand, no waste | |
| 2.0 | 4.0 | Brown silty sand, no waste | |
| 4.0 | 6.0 | Brown silty sand, no waste | |
| 6.0 | 7.0 | Moved up slope and found waste which included lots of plastics | |

Boring Number: TP-19 **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/20/2024

Total Depth: 6 ft

| Total Depth. On | | | | |
|-----------------|----------------|---|--|--|
| | STRATIFICATION | | | |
| Dept | th (Feet) | Sail Dagarintian | | |
| From | To | Soil Description | | |
| | TP-19 | | | |
| 0.0 | 2.0 | Brown silty sand, no waste | | |
| 2.0 | 4.0 | Brown silty sand, no waste | | |
| 4.0 | 6.0 | Brown silty sand with some gray clays, no waste | | |
| 5.0 | 6.0 | moved back east found waste (platics, metal, newspaper) | | |



Boring Number: TP-20 **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/21/2024

Total Depth: 6 ft

| | STRATIFICATION | | |
|------|----------------|------------------------------------|--|
| Dept | th (Feet) | C II D | |
| From | То | Soil Description | |
| | | TP-20 | |
| 0.0 | 2.0 | Brown silty sand, no waste | |
| 2.0 | 4.0 | Maroon moist clays, no waste | |
| 4.0 | 6.0 | Brown silty sand with gray clays, | |
| 4.0 | | no waste | |
| | 3.0 | moved back east found waste | |
| 2.0 | | which included platics, metal, and | |
| | | newspapers. | |

Boring Number: TP-21A **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/21/2024

Total Depth: 6 ft

| | STRATIFICATION | | | |
|------|----------------|---------------------------------|--|--|
| Dept | Depth (Feet) | | | |
| From | To | Soil Description | | |
| | TP-21A | | | |
| 0.0 | 2.0 | Gray/brown silty sand, no waste | | |
| 2.0 | 4.0 | Gray/brown silty sand, no waste | | |
| 4.0 | 8.0 | tan silty sands, no waste | | |

Boring Number: TP-21B **Drilling method:** Test Pits: Excavator

Sampling Personnel: Connor Hicks **Date Drilled:** 3/21/2024 **Total Depth:** 6 ft

| | STRATIFICATION | | | |
|------|----------------|---|--|--|
| Dept | th (Feet) | Sail Description | | |
| From | To | Soil Description | | |
| | | TP-21B | | |
| 0.0 | 2.0 | Brown silty sand with bricks and | | |
| 0.0 | 2.0 | concrete | | |
| 2.0 | 4.0 | Black clays, no waste | | |
| 4.0 | 6.0 | Brown silty sand, no waste | | |
| 2.0 | 3.0 | moved back east found waste which includes plastics | | |





TEST PIT LOG Project Name: Cliffdale Landfill Waste Delineation Assessment

S&ME Job No. 23050459 Task Order 2900RI-1

Subcontracor: Buckeye Elm

Boring Number: SB-1A **Drilling method:** Hand Auger

Sampling Personnel: Connor Hicks

Date: 6/13/2024

Total Depth: 5 ft

| | STRATIFICATION | | |
|------|----------------|--|--|
| Dept | Depth (Feet) | | |
| From | To | Soil Description | |
| | SB-1A | | |
| 0.0 | 4.0 | Brown/tan silty sand | |
| 4.0 | 5.0 | Gray silty sand, plastic waste at 5 ft | |

Boring Number: SB-1B **Drilling method:** Hand Auger

Sampling Personnel: Connor Hicks

Date: 6/13/2024

Total Depth: 5 ft

| | STRATIFICATION | | |
|------|----------------|---------------------------------------|--|
| Dept | th (Feet) | C-11 D- maning 4' and | |
| From | To | Soil Description | |
| | SB-1B | | |
| 0.0 | 4.0 | Orange silty sand | |
| 4.0 | 5.0 | gray fluffy sands, no waste in boring | |

Boring Number: SB-2A **Drilling method:** Hand Auger

Sampling Personnel: Connor Hicks **Date Drilled:** 6/13/2024

Total Depth: 5 ft

| | STRATIFICATION | | |
|------|----------------|--|--|
| Dept | th (Feet) | G 31 D | |
| From | To | Soil Description | |
| | SB-2A | | |
| 0.0 | 4.0 | Orange silty sand | |
| 4.0 | 5.0 | Gray fluffy sands, waste including plastic, foam, and rope at 5 ft | |

Boring Number: SB-2B **Drilling method:** Hand Auger

Sampling Personnel: Connor Hicks **Date Drilled:** 6/13/2024

Total Depth: 5 ft

| | STRATIFICATION | | |
|------|----------------|------------------------------------|--|
| Dept | h (Feet) | C-11 D-1-1-1-1 | |
| From | To | Soil Description | |
| | SB-2B | | |
| 0.0 | 1.0 | orange silty sand | |
| 1.0 | 4.0 | gray sands | |
| 4.0 | 5.0 | Tan gray sands, no waste in boring | |

Boring Number: SB-3 **Drilling method:** Hand Auger

Sampling Personnel: Connor Hicks **Date Drilled:** 6/13/2024 **Total Depth:** 5 ft

| | STRATIFICATION | | |
|------|----------------|--------------------------------|--|
| Dept | th (Feet) | Sail Description | |
| From | To | Soil Description | |
| | | SB-3 | |
| 0.0 | 1.0 | Orange silty sand | |
| 1.0 | 2.0 | Tan fluffy sands | |
| 2.0 | 5.0 | gray sands, no waste in boring | |



Boring Number: SB-4 **Drilling method:** Hand Auger

Sampling Personnel: Connor Hicks **Date Drilled:** 6/13/2024

Total Depth: 5 ft

| | STRA | ATIFICATION |
|------|----------|-------------------------------|
| Dept | h (Feet) | Soil Description |
| From | To | Soil Description |
| | | SB-4 |
| 0.0 | 4.0 | Tan sand |
| 4.0 | 5.0 | Gray sand, no waste in boring |

Boring Number: SB-5 **Drilling method:** Hand Auger

Sampling Personnel: Connor Hicks **Date Drilled:** 6/13/2024

Total Depth: 5 ft

| | STRA | ATIFICATION |
|------|-----------|--|
| Dept | th (Feet) | Soil Description |
| From | To | Soil Description |
| | | SB-5 |
| 0.0 | 2.0 | Black organic sandy soil |
| 2.0 | 3.0 | Gray clay sand |
| 3.0 | 5.0 | wet gray clay sand, groundwater reached at termination of boring, no waste in boring |

Boring Number: SB-6 **Drilling method:** Hand Auger

Sampling Personnel: Connor Hicks **Date Drilled:** 6/13/2024 **Total Depth:** 5 ft

| | STRATIFICATION | | | | | | | | | | | |
|------|----------------|---------------------------------|--|--|--|--|--|--|--|--|--|--|
| Dept | th (Feet) | Soil Description | | | | | | | | | | |
| From | To | Soil Description | | | | | | | | | | |
| | · | SB-6 | | | | | | | | | | |
| 0.0 | 1.0 | Gray clayey sand | | | | | | | | | | |
| 1.0 | 2.0 | red clayey sand | | | | | | | | | | |
| 2.0 | 4.0 | Tan sand | | | | | | | | | | |
| 4.0 | 5.0 | Orange sand, no waste in boring | | | | | | | | | | |



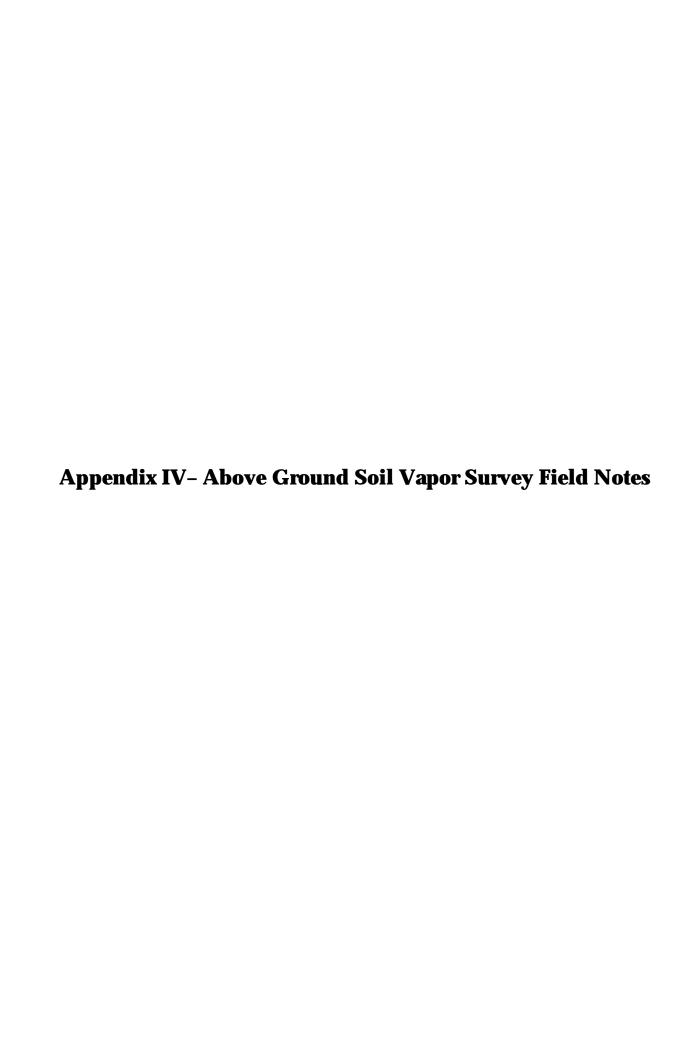
Boring Number: SB-7 **Drilling method:** Hand Auger

Sampling Personnel: Connor Hicks **Date Drilled:** 6/13/2024

Total Depth: 5 ft

| | STRATIFICATION | | | | | | | | | | | |
|------|----------------|---------------------------------------|--|--|--|--|--|--|--|--|--|--|
| Dept | th (Feet) | Soil Description | | | | | | | | | | |
| From | To | Soil Description | | | | | | | | | | |
| SB-7 | | | | | | | | | | | | |
| 0.0 | 2.0 | Orange silty sand | | | | | | | | | | |
| 2.0 | 4.0 | Tan silty sand | | | | | | | | | | |
| 4.0 | 5.0 | Drange silty sand, no waste in boring | | | | | | | | | | |





| Project Name: NCDEQ ID No.: S&ME Project No.: Task Order: PID (Isobutylene) Fresh Air Methane High H2S Mix Sample Location ID BG-01 BG-02 | Cliffdale NCD9809 23050 29001 0 ppm = CH ₄ (0%) = CH ₄ (50%) = O ₂ (0%) = CH4 (0%) = H2S (50 ppm) = Time hr:min 10:55 11:05 | 502900 0459 RI-1 | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Location: | James Waters 100 20.9 35 0 1000 | No Mercu Zero Calibrat Pre-Job Mid-Job Post-Job | iks ıry Meter | Gas Analyzer PID Thermo Hygrometer PID (Isobutylene) Fresh Air Methane High | 0 ppm = CH ₄ (0%) = CH ₄ (50%) = O ₂ (0%) = | G500537 G500537 S92-603681 H11I-H17911 Mid Job Equipment Critiqu 0 0 50.1 | Pre Calibration Time: Mid Critique Time: 100 ppm = O ₂ (20.9%) = CO ₂ (35%) = | 1000 1300 101.2 20.2 34.8 |
|---|--|---|---------------------------------------|--|----------------------------------|---|----------------------------------|---|---|--|---|---------------------------------------|
| S&ME Project No.: Task Order: PID (Isobutylene) Fresh Air Methane High H2S Mix Sample Location ID BG-01 BG-02 | 23050 29001 0 ppm = CH ₄ (0%) = CH ₄ (50%) = O ₂ (0%) = CH4 (0%) = H2S (50 ppm) = Time hr:min 10:55 | 0459 RI-1 Pre () () () () () () () () () () () () () | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Weather: S&ME Personnel: ment Calibration 100 ppm = O ₂ (20.9%) = CO ₂ (35%) = O2 (0%) = CO (1000 ppm) = | James Waters 100 20.9 35 0 1000 | No Mercu Zero Calibrat Pre-Job Mid-Job Post-Job | ury Meter tion/Critique NA NA | PID Thermo Hygrometer PID (Isobutylene) Fresh Air Methane High | Mini RAE 3000 PROTMEX 0 ppm = CH ₄ (0%) = CH ₄ (50%) = O ₂ (0%) = | 592-603681 H11I-H17911 Mid Job Equipment Critiqu 0 0 50.1 | Mid Critique Time: 100 ppm = O ₂ (20.9%) = | 1300 101.2 20.2 |
| Task Order: PID (Isobutylene) Fresh Air Methane High H2S Mix Sample Location ID BG-01 BG-02 | 2900l 0 ppm = CH ₄ (0%) = CH ₄ (50%) = O ₂ (0%) = CH4 (0%) = H2S (50 ppm) = | Pre () () () () () () () () () () () () () | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | S&ME Personnel: ment Calibration 100 ppm = O ₂ (20.9%) = CO ₂ (35%) = O2 (0%) = CO (1000 ppm) = | 100 20.9 35 0 1000 | No Mercu Zero Calibrat Pre-Job Mid-Job | ury Meter tion/Critique NA NA | PID (Isobutylene) Fresh Air Methane High | PROTMEX 0 ppm = CH ₄ (0%) = CH ₄ (50%) = O ₂ (0%)= | H11I-H17911 Mid Job Equipment Critiqu 0 0 50.1 | Mid Critique Time: 100 ppm = O ₂ (20.9%) = | 1300 101.2 20.2 |
| PID (Isobutylene) Fresh Air Methane High H2S Mix Sample Location ID BG-01 BG-02 | 0 ppm = CH ₄ (0%) = CH ₄ (50%) = O ₂ (0%) = CH4 (0%) = H2S (50 ppm) = | Pre C C Si C Mercury Hg ug/m3 | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 100 ppm = O ₂ (20.9%) = CO ₂ (35%) = O2 (0%) = CO (1000 ppm) = | 100 20.9 35 0 1000 | No Mercu Zero Calibrat Pre-Job Mid-Job Post-Job | ury Meter tion/Critique NA NA | PID (Isobutylene) Fresh Air Methane High | 0 ppm = $CH_4 (0\%) =$ $CH_4 (50\%) =$ $O_2 (0\%) =$ | Mid Job Equipment Critiqu 0 0 50.1 | 100 ppm = O ₂ (20.9%) = | 101.2 20.2 |
| Fresh Air Methane High H2S Mix Sample Location ID BG-01 BG-02 | CH ₄ (0%) = CH ₄ (50%) = O ₂ (0%) = CH4 (0%) = H2S (50 ppm) = | Mercury Hg ug/m3 | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 100 ppm = O ₂ (20.9%) = CO ₂ (35%) = O2 (0%) = CO (1000 ppm) = | 20.9 35 0 1000 | Zero Calibrat Pre-Job Mid-Job Post-Job | tion/Critique NA NA | Fresh Air Methane High | 0 ppm = CH ₄ (0%) = CH ₄ (50%) = O ₂ (0%) = | 0 0 50.1 | 100 ppm = O ₂ (20.9%) = | 20.2 |
| Fresh Air Methane High H2S Mix Sample Location ID BG-01 BG-02 | CH ₄ (0%) = CH ₄ (50%) = O ₂ (0%) = CH4 (0%) = H2S (50 ppm) = | Mercury Hg ug/m3 | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | O ₂ (20.9%) = CO ₂ (35%) = O2 (0%) = CO (1000 ppm) = | 20.9 35 0 1000 | Zero Calibrat Pre-Job Mid-Job Post-Job | tion/Critique NA NA | Fresh Air Methane High | $CH_4 (0\%) =$ $CH_4 (50\%) =$ $O_2 (0\%) =$ | 0 50.1 | O ₂ (20.9%) = | 20.2 |
| Methane High H2S Mix Sample Location ID BG-01 BG-02 | CH ₄ (50%) = O ₂ (0%) = CH4 (0%) = H2S (50 ppm) = Time hr:min 10:55 | Mercury Hg ug/m3 | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | CO ₂ (35%) = O2 (0%) = CO (1000 ppm) = | 0 1000 | Pre-Job Mid-Job Post-Job | NA NA | Methane High | CH ₄ (50%) = O ₂ (0%)= | 50.1 | _ | |
| H2S Mix Sample Location ID BG-01 BG-02 | O ₂ (0%) = CH4 (0%) = H2S (50 ppm) = Time hr:min 10:55 | Mercury Hg ug/m3 |))))))))))))))))))) | O2 (0%) = CO (1000 ppm) = | 0 1000 | Pre-Job Mid-Job Post-Job | NA NA | | O ₂ (0%)= | | CO ₂ (35%) = | 34.8 |
| H2S Mix Sample Location ID BG-01 BG-02 | CH4 (0%) = H2S (50 ppm) = Time hr:min 10:55 | Mercury Hg ug/m3 | VOCs | CO (1000 ppm) = | 1000 | Mid-Job Post-Job | NA | | | 0 | | |
| Sample Location ID BG-01 BG-02 | H2S (50 ppm) = Time hr:min 10:55 | Mercury Hg ug/m3 | VOCs | CO (1000 ppm) = | 1000 | Post-Job | | ⊔25 Miv | | | | |
| Sample Location ID BG-01 BG-02 | Time hr:min 10:55 | Mercury Hg ug/m3 | VOCs | | | | NA | | CH4 (0%) = | 0 | O2 (0%) = | 0 |
| BG-01 BG-02 | hr:min 10:55 | Hg ug/m3 | | Meti | hano | Screeni | | | H2S (50 ppm) = | 48 | CO (1000 ppm) = | 989 |
| BG-01 BG-02 | hr:min 10:55 | Hg ug/m3 | | Meti | 1200 | | ing Data | | | | | |
| BG-01 BG-02 | 10:55 | ug/m3 | | | | Carbon | Dioxide | Oxygen | Hydrogen Sulfide | Barometric Pressure | Temperature | Humidity |
| BG-02 | | 1 | % | volume in air (%) | % LEL (100% LEL = 5% CH4) | % | 6 | % | ppm-v | in-Hg | °F | % |
| | 11:05 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.3 | 0 | 30.02 | 77.9 | 34.4 |
| | | NM | 0 | 0.0 | 0 | 0. | .0 | 20.2 | 0 | 30.04 | 74.3 | 38.9 |
| BG-03 | 11:15 | NM | 0 | 0.0 | 0 | 0. | .0 | 19.8 | 0 | 30.03 | 75.3 | 38.9 |
| BG-04 | 11:20 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.0 | 0 | 30.06 | 71.6 | 42.3 |
| M-01 | 11:40 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.0 | 0 | 29.99 | 75.2 | 37.3 |
| N-01 | 11:45 | NM | 0 | 0.0 | 0 | 0.0 | | 20.2 | 0 | 30.02 | 87.0 | 28.4 |
| O-01 | 11:50 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.1 | 0 | 30.02 | 76.2 | 38 |
| P-01 | 1155, | NM | 0 | 0.0 | 0 | 0. | .0 | 20.0 | 0 | 30.02 | 80.4 | 32.9 |
| Q-01 | 12:00 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.0 | 0 | 30.02 | 77.1 | 35.7 |
| R-01 | 12:05 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.0 | 0 | 30.02 | 76.8 | 36.8 |
| S-01 | 12:10 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.0 | 0 | 30.02 | 76.1 | 35.3 |
| S-02 | 12:15 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.1 | 0 | 30.04 | 77.5 | 33 |
| R-02 | 12:20 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.1 | 0 | 30.04 | 75.2 | 40.4 |
| Q-02 | 12:25 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.0 | 0 | 30.01 | 77.0 | 37 |
| P-02 | 12:30 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.0 | 0 | 30.02 | 80.9 | 33.7 |
| O-02 | 12:35 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.2 | 0 | 30.01 | 79.3 | 40 |
| N-02 | 12:40 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.0 | 0 | 30.02 | 81.1 | 34.8 |
| M-02 | 12:45 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.0 | 0 | 30.02 | 78.4 | 35.5 |
| M-03 | 13:20 | NM | 0 | 0.0 | 0 | 0. | .0 | 19.8 | 0 | 29.98 | 79.8 | 32.1 |
| N-03 | 13:23 | NM | 0 | 0.0 | 0 | 0. | .0 | 19.7 | 0 | 29.98 | 83.8 | 31.3 |
| O-03 | 13:26 | NM | 0 | 0.0 | 0 | 0. | .0 | 19.7 | 0 | 29.99 | 86.5 | 28.1 |
| P-03 | 13:29 | NM | 0 | 0.0 | 0 | 0. | | 19.7 | 0 | 29.99 | 86.0 | 33.8 |
| Q-03 | 13:32 | NM | 0 | 0.0 | 0 | 0. | | 19.7 | 0 | 29.99 | 79.3 | 31.5 |
| me | | Signature | | - G. Watu | | Date | | Duplicate-01 is taken | at S-05. Duplicate-02 i | | | |

| | | | | LAND | FILL GAS SCR | EENING | FORM | | | | | 8 |
|-------------------|-------------------------|-------------|--------------|--------------------------|---------------------------------|----------------------|---------------|-----------------------|-------------------------|----------------------------|--------------------------|---------------------------|
| Project Name: | Cliffdale | Landfill | | Location: | 7581 Lowell Harris | Rd. Fayettev | rille, NC | Meter 1 | Гуре/ Meter Name/ Se | erial No.: | | $\overline{\mathbf{m}} =$ |
| NCDEQ ID No.: | NCD980 | 502900 | | Date: | 4/8, | /2024 | | Gas Analyzer | GEM 5000 | G500537 | | $M \equiv$ |
| S&ME Project No.: | 2305 | 0459 | | Weather: | Su | ınny | | PID | Mini RAE 3000 | 592-603681 | Pre Calibration Time: | 1000 |
| Task Order: | 2900 | RI-1 | | S&ME Personnel: | James Water | s, Connor Hic | ks | Thermo Hygrometer | PROTMEX | H11I-H17911 | Mid Critique Time: | 1300 |
| <u> </u> | | Pro | e Job Equipr | nent Calibration | | | | | | Mid Job Equipment Critiqu | ie . | |
| PID (Isobutylene) | 0 ppm = | (| 0 | 100 ppm = | 100 | No Mercu | ury Meter | PID (Isobutylene) | 0 ppm = | 0 | 100 ppm = | 101.2 |
| Fresh Air | CH ₄ (0%) = | (| 0 | O ₂ (20.9%) = | 20.9 | | | Fresh Air | CH ₄ (0%) = | 0 | O ₂ (20.9%) = | 20.2 |
| Methane High | CH ₄ (50%) = | 5 | 60 | CO ₂ (35%) = | 35 | Zero Calibrat | tion/Critique | Methane High | CH ₄ (50%) = | 50.1 | CO ₂ (35%) = | 34.8 |
| Wethane riigii | O ₂ (0%) = | (| 0 | | | Pre-Job | NA | Wiethane Fright | O ₂ (0%)= | 0 | | |
| H2S Mix | CH4 (0%) = | (| 0 | O2 (0%) = | 0 | Mid-Job | NA | H2S Mix | CH4 (0%) = | 0 | O2 (0%) = | 0 |
| HZ3 IVIIX | H2S (50 ppm) = | 5 | 0 | CO (1000 ppm) = | 1000 | Post-Job | NA | HZ3 IVIIX | H2S (50 ppm) = | 48 | CO (1000 ppm) = | 989 |
| | | | ı | | | Screen | ing Data | | | | | |
| Sample Location | Time | Mercury | VOCs | Met | nane | Carbon | Dioxide | Oxygen | Hydrogen Sulfide | Barometric Pressure | Temperature | Humidity |
| ID | hr:min | Hg ug/m3 | % | volume in air (%) | % LEL (100% LEL = 5% CH4) | 9 | 6 | % | ppm-v | in-Hg | °F | % |
| R-03 | 13:35 | NM | 0 | 0.0 | 0 | 0. | .0 | 19.7 | 0 | 29.99 | 78.9 | 33.6 |
| S-03 | 13:38 | NM | 0 | 0.0 | 0 | 0. | .0 | 19.7 | 0 | 29.99 | 76.4 | 39.9 |
| S-04 | 13:41 | NM | 0 | 0.0 | 0 | 0. | .0 | 19.8 | 0 | 29.99 | 76.1 | 34.8 |
| S-05 | 13:44 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.0 | 0 | 29.99 | 77.0 | 32.5 |
| S-06 | 13:47 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.0 | 0 | 30.00 | 78.4 | 32.6 |
| S-07 | 13:50 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.0 | 0 | 30.00 | 82.2 | 31.4 |
| T-07 | 13:53 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.2 | 0 | 30.00 | 82.5 | 29 |
| S-08 | 13:56 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.3 | 0 | 30.00 | 79.5 | 30.7 |
| T-08 | 13:59 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.3 | 0 | 30.00 | 79.1 | 31.2 |
| T-09 | 14:02 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.3 | 0 | 30.00 | 81.1 | 31.6 |
| S-09 | 14:05 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.3 | 0 | 30.00 | 77.0 | 34.6 |
| S-10 | 14:08 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.3 | 0 | 29.99 | 77.1 | 34.7 |
| T-10 | 14:11 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.4 | 0 | 29.99 | 80.7 | 31.4 |
| T-11 | 14:14 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.4 | 0 | 29.99 | 84.7 | 33.2 |
| S-11 | 14:17 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.4 | 0 | 29.99 | 82.2 | 31.3 |
| S-12 | 14:20 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.4 | 0 | 29.97 | 80.2 | 30.7 |
| T-12 | 14:23 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.4 | 0 | 29.97 | 80.0 | 31.8 |
| S-13 | 14:26 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.5 | 0 | 29.97 | 80.4 | 35.3 |
| T-13 | 14:29 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.5 | 0 | 29.97 | 79.7 | 31.2 |
| T-14 | 14:32 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.5 | 0 | 29.97 | 76.4 | 34.7 |
| S-14 | 14:35 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.5 | 0 | 29.97 | 77.8 | 34.7 |
| S-15 | 14:38 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.6 | 0 | 29.97 | 79.3 | 35.4 |
| T-15 | 14:41 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.6 | 0 | 30.00 | 80.7 | 32.4 |
| ame) James Water | | Signature | James | . G. Watu | <u></u> | Date 4/8/2024 | Notes: | Duplicate-01 is taken | at S-05. Duplicate-02 | is taken at T-22. | • | |

| | | | | LAND | FILL GAS SCR | EENING | FORM | | | | | 8 |
|-------------------|-------------------------|-------------|--------------|--------------------------|---------------------------------|--------------|---------------|-----------------------|-------------------------|---------------------------|--------------------------|----------------|
| Project Name: | Cliffdale | Landfill | | Location: | 7581 Lowell Harris | Rd. Fayette | ville, NC | Meter 1 | Гуре/ Meter Name/ Se | erial No.: | | \overline{a} |
| NCDEQ ID No.: | NCD980 | 502900 | | Date: | 4/8, | /2024 | | Gas Analyzer | GEM 5000 | G500537 | | $M \equiv$ |
| S&ME Project No.: | 2305 | 0459 | | Weather: | Su | ınny | | PID | Mini RAE 3000 | 592-603681 | Pre Calibration Time: | 1000 |
| Task Order: | 2900 | RI-1 | | S&ME Personnel: | James Water | s, Connor Hi | cks | Thermo Hygrometer | PROTMEX | H11I-H17911 | Mid Critique Time: | 1300 |
| | | Pro | e Job Equipı | ment Calibration | | | | | | Mid Job Equipment Critiqu | ıe | |
| PID (Isobutylene) | 0 ppm = | (|) | 100 ppm = | 100 | No Merc | ury Meter | PID (Isobutylene) | 0 ppm = | 0 | 100 ppm = | 101.2 |
| Fresh Air | CH ₄ (0%) = | (|) | O ₂ (20.9%) = | 20.9 | | | Fresh Air | CH ₄ (0%) = | 0 | O ₂ (20.9%) = | 20.2 |
| Methane High | CH ₄ (50%) = | 5 | 0 | CO ₂ (35%) = | 35 | Zero Calibra | tion/Critique | Methane High | CH ₄ (50%) = | 50.1 | CO ₂ (35%) = | 34.8 |
| | O ₂ (0%) = | (|) | | | Pre-Job | NA | | O ₂ (0%)= | 0 | | |
| H2S Mix | CH4 (0%) = | (|) | O2 (0%) = | 0 | Mid-Job | NA | H2S Mix | CH4 (0%) = | 0 | O2 (0%) = | 0 |
| TIZS IVIIX | H2S (50 ppm) = | 5 | 0 | CO (1000 ppm) = | 1000 | Post-Job | NA | TIES WIIX | H2S (50 ppm) = | 48 | CO (1000 ppm) = | 989 |
| | | | | | | | ing Data | | | | | |
| Sample Location | Time | Mercury | VOCs | Met | hane | Carbon | Dioxide | Oxygen | Hydrogen Sulfide | Barometric Pressure | Temperature | Humidity |
| ID | hr:min | Hg ug/m3 | % | volume in air (%) | % LEL (100% LEL = 5% CH4) | ģ | % | % | ppm-v | in-Hg | °F | % |
| S-16 | 14:44 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.7 | 0 | 30.00 | 76.8 | 34.3 |
| T-16 | 14:47 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.7 | 0 | 29.99 | 75.9 | 35.7 |
| T-17 | 14:50 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.7 | 0 | 29.90 | 79.8 | 37 |
| S-17 | 14:53 | NM | 0 | 0.0 | 0 | 0 | .0 | 208 | 0 | 29.99 | 78.0 | 35 |
| T-18 | 14:56 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 29.99 | 76.2 | 36 |
| S-18 | 14:59 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.1 | 0 | 29.99 | 76.4 | 35.4 |
| S-19 | 15:02 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 29.99 | 77.5 | 36.1 |
| T-19 | 15:05 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.9 | 0 | 29.99 | 77.9 | 35.6 |
| U-19 | 15:08 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.9 | 0 | 29.99 | 77.1 | 35.8 |
| V-19 | 15:11 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.9 | 0 | 29.99 | 76.1 | 35.3 |
| V-20 | 15:14 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.9 | 0 | 29.99 | 75.5 | 37.8 |
| U-20 | 15:17 | NM | 0 | 0.0 | 0 | 0 | .0 | 21.0 | 0 | 29.99 | 78.1 | 38.1 |
| U-21 | 15:20 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.9 | 0 | 30.00 | 76.8 | 34.5 |
| V-21 | 15:23 | NM | 0 | 0.0 | 0 | 0 | .0 | 21.0 | 0 | 30.00 | 76.6 | 37.8 |
| V-22 | 15:26 | NM | 0 | 0.0 | 0 | 0 | .0 | 21.0 | 0 | 30.00 | 77.5 | 36.6 |
| U-22 | 15:29 | NM | 0 | 0.0 | 0 | 0 | .0 | 21.0 | 0 | 30.00 | 76.6 | 36.9 |
| U-23 | 15:32 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.9 | 0 | 30.01 | 75.2 | 39.5 |
| U-24 | 15:35 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.9 | 0 | 30.01 | 75.2 | 31.6 |
| T-24 | 15:38 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.9 | 0 | 30.01 | 75.5 | 44 |
| T-23 | 15:41 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.9 | 0 | 30.01 | 76.8 | 38.6 |
| T-22 | 15:44 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.9 | 0 | 30.01 | 76.8 | 37.3 |
| T-21 | 15:47 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.9 | 0 | 30.01 | 77.9 | 36.8 |
| T-20 | 15:50 | NM | 0 | 0.0 | 0 | 0 | .0 | 21.0 | 0 | 30.01 | 76.2 | 36.9 |
| ame | - | Signature | k | G. Water | <u>.</u> | Date | Notes: | Duplicate-01 is taken | at S-05. Duplicate-02 i | is taken at T-22. | • | |
|) James Waters | S | | I WI TO | - i · Www | 7 | 4/8/2024 | <u> </u> | | | | | |

| Project Name: | Cliffdala | Landfill | | | 7581 Lowell Harris | Pd Favotto | illo NC | Motor | Гуре/ Meter Name/ Se | rial No : | | 411 |
|-----------------------|-------------------------|-------------|--------------|--------------------------|---------------------------------|----------------------|---------------|-----------------------|-------------------------|----------------------------|--------------------------|-----------------|
| NCDEQ ID No.: | NCD980 | | | Location: Date: | | /2024 | /ille, IVC | Gas Analyzer | GEM 5000 | G500537 | | $\Pi\Pi \equiv$ |
| S&ME Project No.: | 2305 | | | Weather: | | unny | | PID | Mini RAE 3000 | 592-603681 | Mid Critique Time: | 1300 |
| Task Order: | 2900 | | | S&ME Personnel: | James Water | | -ke | Thermo Hygrometer | PROTMEX | H11I-H17911 | Post Critique Time: | 1735 |
| rask Order. | 2500 | | 1id Job Equi | pment Critique | James Water | 3, COIIIOI TIIC | | memo riygrometer | | Post Job Equipment Critiqu | - | 1733 |
| PID (Isobutylene) | 0 ppm = | |) | 100 ppm = | 101.2 | No Mercu | ury Meter | PID (Isobutylene) | 0 ppm = | 0 | 100 ppm = | 97.2 |
| Fresh Air | CH ₄ (0%) = | (|) | O ₂ (20.9%) = | 20.2 | | | Fresh Air | CH ₄ (0%) = | 0 | O ₂ (20.9%) = | 20.8 |
| Madhanalliah | CH ₄ (50%) = | 50 |).1 | CO ₂ (35%) = | 34.8 | Zero Calibrat | tion/Critique | Madena | CH ₄ (50%) = | 50.3 | CO ₂ (35%) = | 35.2 |
| Methane High | O ₂ (0%) = | (|) | | | Pre-Job | NA | Methane High | O ₂ (0%)= | 0 | | |
| 1136 14 | CH4 (0%) = | (|) | O2 (0%) = | 0 | Mid-Job | NA | 1126 147 | CH4 (0%) = | 0 | O2 (0%) = | 0 |
| H2S Mix | H2S (50 ppm) = | 4 | .8 | CO (1000 ppm) = | 989 | Post-Job | NA | H2S Mix | H2S (50 ppm) = | 49 | CO (1000 ppm) = | 992 |
| • | | | | | | Screen | ing Data | | | | | |
| Sample Location | Time | Mercury | VOCs | Meth | | Carbon | Dioxide | Oxygen | Hydrogen Sulfide | Barometric Pressure | Temperature | Humidity |
| ID | hr:min | Hg ug/m3 | % | volume in air (%) | % LEL (100% LEL = 5% CH4) | 9 | % | % | ppm-v | in-Hg | °F | % |
| S-20 | 15:53 | NM | 0 | 0.0 | 0 | 0. | .0 | 21.0 | 0 | 30.01 | 75.0 | 38.7 |
| S-21 | 15:56 | NM | 0 | 0.0 | 0 | 0. | .0 | 21.0 | 0 | 30.01 | 75.9 | 35.9 |
| S-22 | 15:59 | NM | 0 | 0.0 | 0 | 0. | .0 | 21.0 | 0 | 30.01 | 76.6 | 38.5 |
| R-21 | 16:02 | NM | 0 | 0.0 | 0 | 0. | .0 | 21.0 | 0 | 30.01 | 77.9 | 39.2 |
| R-20 | 16:05 | NM | 0 | 0.0 | 0 | 0. | .0 | 21.0 | 0 | 30.01 | 80.2 | 37 |
| R-19 | 16:08 | NM | 0 | 0.0 | 0 | 0. | .0 | 21.0 | 0 | 30.01 | 79.5 | 38.8 |
| R-18 | 16:11 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 30.01 | 78.4 | 37.3 |
| R-17 | 16:14 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.98 | 77.9 | 36.8 |
| R-16 | 16:17 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.98 | 78.0 | 37.7 |
| R-15 | 16:20 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.98 | 80.9 | 37.1 |
| R-14 | 16:23 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.1 | 0 | 29.98 | 80.2 | 38.7 |
| R-13 | 16:26 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.96 | 77.7 | 35.2 |
| R-12 | 16:29 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.96 | 76.8 | 37 |
| R-11 | 16:32 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.96 | 79.0 | 36.8 |
| R-08 | 16:35 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.95 | 77.1 | 34.8 |
| R-07 | 16:38 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.95 | 78.2 | 34.6 |
| R-06 | 16:41 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.95 | 77.3 | 34.6 |
| R-05 | 16:44 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.95 | 78.2 | 36.2 |
| R-04 | 16:47 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.95 | 77.9 | 35.4 |
| Duplicate-01 | 16:55 | NM | 0 | 0.0 | 0 | 0. | .0 | | 0 | | | |
| Duplicate-02 | 17:00 | NM | 0 | 0.0 | 0 | 0. | .0 | _ | 0 | | | |
| BG-01 | 17:10 | NM | 0 | 0.0 | 0 | 0. | .0 | | 0 | | | |
| BG-02 | 17:20 | NM | 0 | 0.0 | 0 | 0. | .0 | | 0 | | | |
| me James Water | s | Signature | James | . Cr. Watr | <u></u> | Date 4/8/2024 | Notes: | Duplicate-01 is taken | at S-05. Duplicate-02 | s taken at T-22. | | |

| | | | | LAND | FILL GAS SCR | EENING | FORM | | | | | |
|--------------------|-------------------------|-------------|------|--------------------------|-------------------------|----------------------|----------------|-----------------------|-------------------------|----------------------------|--------------------------|----------|
| Project Name: | Cliffdale | Landfill | | Location: | 7581 Lowell Harris | Rd. Fayettev | ille, NC | Meter 1 | Type/ Meter Name/ Se | erial No.: | | 111 = |
| NCDEQ ID No.: | NCD980 | 502900 | | Date: | 4/8/ | /2024 | | Gas Analyzer | GEM 5000 | G500537 | | щ |
| S&ME Project No.: | 2305 | 0459 | | Weather: | Su | inny | | PID | Mini RAE 3000 | 592-603681 | Mid Critique Time: | 1300 |
| Task Order: | 2900 | | | S&ME Personnel: | James Waters | s, Connor Hic | :ks | Thermo Hygrometer | PROTMEX | H11I-H17911 | Post Critique Time: | 1735 |
| DID (I I I I I I | | ı | • | pment Critique | 101.3 | | | DID (I. I. I. I.) | | Post Job Equipment Critiqu | | 07.0 |
| PID (Isobutylene) | 0 ppm = | | 0 | 100 ppm = | 101.2 | No Mercu | iry Meter | PID (Isobutylene) | 0 ppm = | | 100 ppm = | 97.2 |
| Fresh Air | CH ₄ (0%) = | | 0 | O ₂ (20.9%) = | 20.2 | Zero Calibrat | i /C-iki | Fresh Air | CH ₄ (0%) = | 0 | O ₂ (20.9%) = | 20.8 |
| Methane High | CH ₄ (50%) = | 50 | | CO ₂ (35%) = | 34.8 | | | Methane High | CH ₄ (50%) = | 50.3 | CO ₂ (35%) = | 35.2 |
| | O ₂ (0%) = | | 0 | 02 (00) | 0 | Pre-Job | NA | | O ₂ (0%)= | 0 | 03 (0%) | |
| H2S Mix | CH4 (0%) = | | 0 | O2 (0%) = | 0 | Mid-Job | NA | H2S Mix | CH4 (0%) = | | O2 (0%) = | 0 |
| | H2S (50 ppm) = | 4 | 18 | CO (1000 ppm) = | 989 | Post-Job | NA ing Data | | H2S (50 ppm) = | 49 | CO (1000 ppm) = | 992 |
| Sample Location | Time | Mercury | VOCs | Meth | nane | Carbon | _ | Oxygen | Hydrogen Sulfide | Barometric Pressure | Temperature | Humidity |
| ID | hr:min | Hg ug/m3 | % | volume in air (%) | % LEL (100% LEL = 5% | % | | % | ppm-v | in-Hg | °F | % |
| S-20 | 15:53 | NM | 0 | 0.0 | CH4) 0 | 0. | 0 | 21.0 | 0 | 30.01 | 75.0 | 38.7 |
| S-21 | 15:56 | NM | 0 | 0.0 | 0 | 0. | | 21.0 | 0 | 30.01 | 75.9 | 35.9 |
| S-22 | 15:59 | NM | 0 | 0.0 | 0 | 0. | | 21.0 | 0 | 30.01 | 76.6 | 38.5 |
| R-21 | 16:02 | NM | 0 | 0.0 | 0 | 0. | | 21.0 | 0 | 30.01 | 77.9 | 39.2 |
| R-20 | 16:05 | NM | 0 | 0.0 | 0 | 0. | | 21.0 | 0 | 30.01 | 80.2 | 37 |
| R-19 | 16:08 | NM | 0 | 0.0 | 0 | 0. | .0 | 21.0 | 0 | 30.01 | 79.5 | 38.8 |
| R-18 | 16:11 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 30.01 | 78.4 | 37.3 |
| R-17 | 16:14 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.98 | 77.9 | 36.8 |
| R-16 | 16:17 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.98 | 78.0 | 37.7 |
| R-15 | 16:20 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.98 | 80.9 | 37.1 |
| R-14 | 16:23 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.1 | 0 | 29.98 | 80.2 | 38.7 |
| R-13 | 16:26 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.96 | 77.7 | 35.2 |
| R-12 | 16:29 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.96 | 76.8 | 37 |
| R-11 | 16:32 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.96 | 79.0 | 36.8 |
| R-08 | 16:35 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.95 | 77.1 | 34.8 |
| R-07 | 16:38 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.95 | 78.2 | 34.6 |
| R-06 | 16:41 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.95 | 77.3 | 34.6 |
| R-05 | 16:44 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.9 | 0 | 29.95 | 78.2 | 36.2 |
| R-04 | 16:47 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.9 | 0 | 29.95 | 77.9 | 35.4 |
| Duplicate-01 | 16:55 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.9 | 0 | 29.95 | 79.2 | 34.6 |
| Duplicate-02 | 17:00 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.9 | 0 | 29.94 | 81.3 | 32.8 |
| BG-01 | 17:10 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.94 | 82.9 | 31.7 |
| BG-02 | 17:15 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.9 | 0 | 29.93 | 78.1 | 34.9 |
| me James Waters | s | Signature | ine | C1. Watry | _ | Date 4/8/2024 | Notes: | Duplicate-01 is taken | at S-05. Duplicate-02 | is taken at T-22. | | |

| | | | | LAND | FILL GAS SCR | EENING | FORM | | | | | 8 |
|-------------------|-------------------------|-------------|--------------|--------------------------|---------------------------------|----------------|--------------|-----------------------|-------------------------|----------------------------|--------------------------|--------------|
| Project Name: | Cliffdale | Landfill | | Location: | 7581 Lowell Harris | Rd. Fayettev | ille, NC | Meter 1 | Type/ Meter Name/ Se | erial No.: | | |
| NCDEQ ID No.: | NCD980 | 0502900 | | Date: | 4/8/ | 2024 | | Gas Analyzer | GEM 5000 | G500537 | | $\Pi \equiv$ |
| S&ME Project No.: | 2305 | 0459 | | Weather: | Su | nny | | PID | Mini RAE 3000 | 592-603681 | Mid Critique Time: | 1300 |
| Task Order: | 2900 | DRI-1 | | S&ME Personnel: | James Waters | , Connor Hic | ks | Thermo Hygrometer | PROTMEX | H11I-H17911 | Post Critique Time: | 1735 |
| | | N | Mid Job Equi | pment Critique | | | | | | Post Job Equipment Critiqu | ie | |
| PID (Isobutylene) | 0 ppm = | 1 | 0 | 100 ppm = | 101.2 | No Mercu | ry Meter | PID (Isobutylene) | 0 ppm = | 0 | 100 ppm = | 97.2 |
| Fresh Air | CH ₄ (0%) = | 1 | 0 | O ₂ (20.9%) = | 20.2 | | | Fresh Air | CH ₄ (0%) = | 0 | O ₂ (20.9%) = | 20.8 |
| Mothano High | CH ₄ (50%) = | 50 | 0.1 | CO ₂ (35%) = | 34.8 | Zero Calibrati | ion/Critique | Methane High | CH ₄ (50%) = | 50.3 | CO ₂ (35%) = | 35.2 |
| Methane High | O ₂ (0%) = | | 0 | | | Pre-Job | NA | Wethane High | O ₂ (0%)= | 0 | | |
| | CH4 (0%) = | | 0 | O2 (0%) = | 0 | Mid-Job | NA | | CH4 (0%) = | 0 | O2 (0%) = | 0 |
| H2S Mix | H2S (50 ppm) = | 4 | 48 | CO (1000 ppm) = | 989 | Post-Job | NA | H2S Mix | H2S (50 ppm) = | 49 | CO (1000 ppm) = | 992 |
| | | | | | | Screeni | ng Data | | | | | |
| Sample Location | Time | Mercury | VOCs | Meti | nane | Carbon I | Dioxide | Oxygen | Hydrogen Sulfide | Barometric Pressure | Temperature | Humidity |
| ID | hr:min | Hg ug/m3 | % | volume in air (%) | % LEL (100% LEL = 5% CH4) | % | 5 | % | ppm-v | in-Hg | °F | % |
| BG-03 | 17:25 | NM | 0 | 0.0 | 0 | 0.0 | 0 | 20.8 | 0 | 29.96 | 77.7 | 35.8 |
| BG-04 | 17:30 | NM | 0 | 0.0 | 0 | 0.0 | 0 | 20.8 | 0 | 29.96 | 81.6 | 31.9 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Name | | Signature | | | | Date | Notes: | Duplicate-01 is taken | at S-05. Duplicate-02 | is taken at T-22. | | |
| 1) James Water | | 9 | ame | G. Watry | <u> </u> | 4/8/2024 | | | | | | |

| | | | | LAND | FILL GAS SCR | EENING | FORM | | | | | 8 |
|-------------------|-------------------------|-------------|--------------|--------------------------|---------------------------------|---------------|---------------|-----------------------|-------------------------|---------------------------|--------------------------|------------|
| Project Name: | Cliffdale | Landfill | | Location: | 7581 Lowell Harris | Rd. Fayette | ille, NC | Meter 1 | Type/ Meter Name/ Se | erial No.: | | |
| NCDEQ ID No.: | NCD980 | 0502900 | | Date: | 4/9, | /2024 | | Gas Analyzer | GEM 5000 | G500537 | | $M \equiv$ |
| S&ME Project No.: | 2305 | 0459 | | Weather: | Ove | ercast | | PID | Mini RAE 3000 | 592-603681 | Pre Calibration Time: | 900 |
| Task Order: | 2900 | DRI-1 | | S&ME Personnel: | James Water | s, Connor Hid | ks | Thermo Hygrometer | PROTMEX | H11I-H17911 | Mid Critique Time: | 1240 |
| | | Pro | e Job Equipi | ment Calibration | | | | | | Mid Job Equipment Critiqu | ue | |
| PID (Isobutylene) | 0 ppm = | (| 0 | 100 ppm = | 100 | No Merci | ury Meter | PID (Isobutylene) | 0 ppm = | 0 | 100 ppm = | 100.8 |
| Fresh Air | CH ₄ (0%) = | (| 0 | O ₂ (20.9%) = | 20.9 | | | Fresh Air | CH ₄ (0%) = | 0 | O ₂ (20.9%) = | 20.5 |
| Methane High | CH ₄ (50%) = | 5 | 0 | CO ₂ (35%) = | 35 | Zero Calibra | tion/Critique | Methane High | CH ₄ (50%) = | 49.7 | CO ₂ (35%) = | 35.3 |
| Methalle High | O ₂ (0%) = | (| 0 | | | Pre-Job | NA | ivietnane riigii | O ₂ (0%)= | 0 | | , |
| LIGG ME. | CH4 (0%) = | (| 0 | O2 (0%) = | 0 | Mid-Job | NA | LIDE Min | CH4 (0%) = | 0 | O2 (0%) = | 0 |
| H2S Mix | H2S (50 ppm) = | 5 | 60 | CO (1000 ppm) = | 1000 | Post-Job | NA | H2S Mix | H2S (50 ppm) = | 49 | CO (1000 ppm) = | 991 |
| | | | | | | Screen | ing Data | | | | | |
| Sample Location | Time | Mercury | VOCs | Met | hane | Carbon | Dioxide | Oxygen | Hydrogen Sulfide | Barometric Pressure | Temperature | Humidity |
| ID | hr:min | Hg ug/m3 | % | volume in air (%) | % LEL (100% LEL = 5% CH4) | 9 | 6 | % | ppm-v | in-Hg | °F | % |
| BG-01 | 09:35 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.5 | 0 | 30.00 | 64.7 | 62 |
| BG-02 | 09:45 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.5 | 0 | 30.01 | 66.2 | 58.7 |
| BG-03 | 09:55 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.6 | 0 | 30.01 | 74.8 | 45.8 |
| BG-04 | 10:00 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.7 | 0 | 30.03 | 69.9 | 52.5 |
| H-01 | 10:15 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 29.98 | 67.1 | 58.4 |
| G-01 | 10:18 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.9 | 0 | 29.98 | 68.1 | 60.6 |
| F-01 | 10:21 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.9 | 0 | 29.98 | 61.7 | 70.4 |
| E-01 | 10:24 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 29.98 | 66.8 | 65.3 |
| D-01 | 10:27 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 29.98 | 65.8 | 63.5 |
| C-01 | 10:30 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 29.98 | 66.5 | 61.2 |
| B-01 | 10:33 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 29.98 | 65.1 | 64.9 |
| A-01 | 10:36 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 29.98 | 66.0 | 67.2 |
| C-02 | 10:39 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 29.98 | 66.2 | 64.7 |
| B-02 | 10:42 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 29.98 | 65.4 | 65.9 |
| B-03 | 10:45 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 29.99 | 65.8 | 64.7 |
| C-03 | 10:48 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 29.99 | 66.2 | 64.2 |
| C-04 | 10:51 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.7 | 0 | 29.99 | 66.5 | 65.5 |
| C-05 | 10:54 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 29.99 | 66.9 | 66.1 |
| D-06 | 10:57 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 29.99 | 66.3 | 66 |
| D-05 | 11:00 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 30.02 | 67.2 | 65.5 |
| D-04 | 11:03 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 30.02 | 66.7 | 67 |
| D-03 | 11:06 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 30.02 | 66.7 | 68.3 |
| D-02 | 11:09 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.8 | 0 | 30.02 | 65.6 | 70.5 |
| ame | | Signature | | | | Date | Notes: | Duplicate-03 is taken | at D-03. Duplicate-04 | is taken at H-08. | <u> </u> | |
|) James Water | s | <u></u> | ame | C1. Water | | 4/9/2024 | | | | | | |

| Project Name: | Cliffdale | Landfill | | , , | 7581 Lowell Harris | Rd Favettev | rille NC | Meter - | Type/ Meter Name/ Se | erial No : | | <i>-</i> |
|-------------------|-------------------------|-------------|--------------|--------------------------|---------------------------------|----------------------|---------------|-----------------------|-------------------------|---------------------------|--------------------------|----------|
| NCDEQ ID No.: | NCD980 | | | Location: Date: | | /2024 | ine, ive | Gas Analyzer | GEM 5000 | G500537 | | HI = |
| S&ME Project No.: | 2305 | | | Weather: | | ercast | | PID | Mini RAE 3000 | 592-603681 | Pre Calibration Time: | 900 |
| Task Order: | 2900 | | | S&ME Personnel: | James Water | | ·kc | Thermo Hygrometer | PROTMEX | H11I-H17911 | Mid Critique Time: | 1240 |
| rask Order. | 2300 | | e Job Equipr | ment Calibration | James Water. | 5, COIIIOI TIIC | | Themso Hygrometer | 1 | Mid Job Equipment Critiqu | • | 1240 |
| PID (Isobutylene) | 0 ppm = | (|) | 100 ppm = | 100 | No Mercu | ıry Meter | PID (Isobutylene) | 0 ppm = | 0 | 100 ppm = | 100.8 |
| Fresh Air | CH ₄ (0%) = | (|) | O ₂ (20.9%) = | 20.9 | | | Fresh Air | CH ₄ (0%) = | 0 | O ₂ (20.9%) = | 20.5 |
| | CH ₄ (50%) = | 5 | 0 | CO ₂ (35%) = | 35 | Zero Calibrat | tion/Critique | M (1 115 1 | CH ₄ (50%) = | 49.7 | CO ₂ (35%) = | 35.3 |
| Methane High | O ₂ (0%) = | (|) | | | Pre-Job | NA | Methane High | O ₂ (0%)= | 0 | · | |
| 1126 14: | CH4 (0%) = | (|) | O2 (0%) = | 0 | Mid-Job | NA | 1126 | CH4 (0%) = | 0 | O2 (0%) = | 0 |
| H2S Mix | H2S (50 ppm) = | 5 | 0 | CO (1000 ppm) = | 1000 | Post-Job | NA | H2S Mix | H2S (50 ppm) = | 49 | CO (1000 ppm) = | 991 |
| | | l. | | | | Screen | ing Data | | | | | |
| Sample Location | Time | Mercury | VOCs | Meth | ane | Carbon | Dioxide | Oxygen | Hydrogen Sulfide | Barometric Pressure | Temperature | Humidity |
| ID | hr:min | Hg ug/m3 | % | volume in air (%) | % LEL (100% LEL = 5% CH4) | 9/ | 6 | % | ppm-v | in-Hg | °F | % |
| E-02 | 11:12 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.8 | 0 | 30.02 | 66.2 | 68.8 |
| E-03 | 11:15 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.8 | 0 | 30.02 | 66.7 | 70.4 |
| E-04 | 11:18 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.8 | 0 | 30.02 | 67.6 | 68.6 |
| E-05 | 11:21 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.8 | 0 | 29.96 | 68.3 | 65.2 |
| E-06 | 11:24 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.8 | 0 | 29.96 | 68.3 | 65 |
| E-07 | 11:27 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.8 | 0 | 29.96 | 67.8 | 64 |
| E-08 | 11:30 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.8 | 0 | 29.96 | 67.1 | 64.6 |
| F-10 | 11:33 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.8 | 0 | 29.96 | 69.2 | 63.7 |
| F-09 | 11:36 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.96 | 69.2 | 65.9 |
| F-08 | 11:39 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.99 | 68.0 | 63.1 |
| F-07 | 11:42 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.99 | 68.1 | 63.5 |
| F-06 | 11:45 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.99 | 68.5 | 63.2 |
| F-05 | 11:48 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.99 | 68.9 | 63.6 |
| F-04 | 11:51 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.99 | 67.6 | 64.9 |
| F-03 | 11:54 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.97 | 67.4 | 66.9 |
| F-02 | 11:57 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.97 | 66.7 | 68 |
| G-02 | 12:00 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.1 | 0 | 29.97 | 67.2 | 67.4 |
| H-02 | 12:03 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.97 | 67.6 | 64.7 |
| G-03 | 13:00 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.4 | 0 | 29.94 | 71.0 | 62.8 |
| G-04 | 13:03 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.4 | 0 | 29.94 | 69.6 | 64.1 |
| G-05 | 13:06 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.4 | 0 | 29.94 | 70.1 | 62.5 |
| G-06 | 13:09 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.4 | 0 | 29.94 | 68.7 | 75.7 |
| G-07 | 13:12 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.4 | 0 | 29.94 | 67.8 | 63.3 |
| ame James Water | | Signature | | L G. Wate | | Date 4/9/2024 | | Duplicate-03 is taken | at D-03. Duplicate-04 | | | |

| | | | | LAND | FILL GAS SCR | EENING | FORM | | | | | 8 |
|-------------------|-------------------------|-------------|--------------|--------------------------|---------------------------------|---------------|---------------|-----------------------|-------------------------|---------------------------|--------------------------|------------------|
| Project Name: | Cliffdale | Landfill | | Location: | 7581 Lowell Harris | Rd. Fayette | ville, NC | Meter 1 | Гуре/ Meter Name/ Se | erial No.: | | $\overline{m} =$ |
| NCDEQ ID No.: | NCD980 | 0502900 | | Date: | 4/9, | /2024 | | Gas Analyzer | GEM 5000 | G500537 | | $M \equiv$ |
| S&ME Project No.: | 2305 | 0459 | | Weather: | Ove | ercast | | PID | Mini RAE 3000 | 592-603681 | Pre Calibration Time: | 900 |
| Task Order: | 2900 | DRI-1 | | S&ME Personnel: | James Water | s, Connor Hid | cks | Thermo Hygrometer | PROTMEX | H11I-H17911 | Mid Critique Time: | 1240 |
| | | Pro | e Job Equipr | nent Calibration | | | | | | Mid Job Equipment Critiqu | ie | |
| PID (Isobutylene) | 0 ppm = | (|) | 100 ppm = | 100 | No Merci | ury Meter | PID (Isobutylene) | 0 ppm = | 0 | 100 ppm = | 100.8 |
| Fresh Air | CH ₄ (0%) = | (|) | O ₂ (20.9%) = | 20.9 | | | Fresh Air | CH ₄ (0%) = | 0 | O ₂ (20.9%) = | 20.5 |
| Methane High | CH ₄ (50%) = | 5 | 0 | CO ₂ (35%) = | 35 | Zero Calibra | tion/Critique | Methane High | CH ₄ (50%) = | 49.7 | CO ₂ (35%) = | 35.3 |
| et.ia.ie r.igii | O ₂ (0%) = | (|) | | | Pre-Job | NA | et.iane i iigii | O ₂ (0%)= | 0 | | |
| H2S Mix | CH4 (0%) = | (| ס | O2 (0%) = | 0 | Mid-Job | NA | H2S Mix | CH4 (0%) = | 0 | O2 (0%) = | 0 |
| TIZS IVIIX | H2S (50 ppm) = | 5 | 0 | CO (1000 ppm) = | 1000 | Post-Job | NA | TIZS WIIX | H2S (50 ppm) = | 49 | CO (1000 ppm) = | 991 |
| | | | | | | | ing Data | | | | | |
| Sample Location | Time | Mercury | VOCs | Met | hane | Carbon | Dioxide | Oxygen | Hydrogen Sulfide | Barometric Pressure | Temperature | Humidity |
| ID | hr:min | Hg ug/m3 | % | volume in air (%) | % LEL (100% LEL = 5% CH4) | 9 | % | % | ppm-v | in-Hg | °F | % |
| G-08 | 13:15 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.4 | 0 | 29.98 | 67.8 | 65.9 |
| G-09 | 13:18 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.5 | 0 | 29.98 | 68.5 | 63.9 |
| G-10 | 13:21 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.5 | 0 | 29.98 | 69.2 | 63.7 |
| G-11 | 13:24 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.5 | 0 | 29.98 | 70.7 | 62.3 |
| G-12 | 13:27 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.5 | 0 | 29.98 | 70.3 | 62 |
| H-12 | 13:30 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.5 | 0 | 29.98 | 60.3 | 62.4 |
| H-11 | 13:33 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.5 | 0 | 29.98 | 72.3 | 59.7 |
| H-10 | 13:36 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.5 | 0 | 29.97 | 71.6 | 60.7 |
| H-09 | 13:39 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.5 | 0 | 29.97 | 71.4 | 60.7 |
| H-08 | 13:42 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.5 | 0 | 29.97 | 69.8 | 71.7 |
| H-07 | 13:45 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.6 | 0 | 29.97 | 68.5 | 63.3 |
| H-06 | 13:48 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.6 | 0 | 29.97 | 70.5 | 60.7 |
| H-05 | 13:51 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.6 | 0 | 29.97 | 70.7 | 61.4 |
| H-04 | 13:54 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.6 | 0 | 29.97 | 70.8 | 58.2 |
| H-03 | 13:57 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.6 | 0 | 29.99 | 73.2 | 58.3 |
| I-01 | 14:00 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.6 | 0 | 29.99 | 74.6 | 53.9 |
| I-02 | 14:03 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.6 | 0 | 29.99 | 71.6 | 51.9 |
| I-03 | 14:06 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.5 | 0 | 29.99 | 73.9 | 55.9 |
| I-04 | 14:09 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.5 | 0 | 29.99 | 72.3 | 52.1 |
| I-05 | 14:12 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.5 | 0 | 29.98 | 70.1 | 60.7 |
| I-06 | 14:15 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.5 | 0 | 29.98 | 68.9 | 62.5 |
| I-07 | 14:18 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.6 | 0 | 29.98 | 69.2 | 62.2 |
| I-08 | 14:21 | NM | 0 | 0.0 | 0 | 0 | .0 | 20.6 | 0 | 29.98 | 70.3 | 61 |
| ame | | Signature | | | | Date | Notes: | Duplicate-03 is taken | at D-03. Duplicate-04 | is taken at H-08. | <u> </u> | |
|) James Water | s | <u></u> | anu | C1. Watry | | 4/9/2024 | | | | | | |

| | | | | LAND | FILL GAS SCR | EEMING | PORIVI | | | | | = 8 |
|--------------------|-------------------------|-------------|------------|--------------------------|-------------------------|----------------------|----------------|-----------------------|------------------------------------|----------------------------|--------------------------|----------|
| Project Name: | Cliffdale | Landfill | | Location: | 7581 Lowell Harris | Rd. Fayettev | rille, NC | Meter 1 | Type/ Meter Name/ Se | erial No.: | | IIII = |
| NCDEQ ID No.: | NCD980 | 502900 | | Date: | 4/9, | /2024 | | Gas Analyzer | GEM 5000 | G500537 | | щ |
| S&ME Project No.: | 2305 | 0459 | | Weather: | Ove | ercast | | PID | Mini RAE 3000 | 592-603681 | Mid Critique Time: | 1240 |
| Task Order: | 2900 | | | S&ME Personnel: | James Waters | , Connor Hic | :ks | Thermo Hygrometer | PROTMEX | H11I-H17911 | Post Critique Time: | 1615 |
| DID (lask totals) | 0 | 1 | • | pment Critique | 100.0 | No Mana | | DID (laste states) | | Post Job Equipment Critiqu | | 00.4 |
| PID (Isobutylene) | 0 ppm = | |)) | 100 ppm = | 20.5 | No Mercu | iry Meter | PID (Isobutylene) | 0 ppm = | 0 | 100 ppm = | 99.4 |
| Fresh Air | CH ₄ (0%) = | | | O ₂ (20.9%) = | | Zero Calibrat | tion/Critique | Fresh Air | CH ₄ (0%) = | | O ₂ (20.9%) = | 20.7 |
| Methane High | CH ₄ (50%) = | | 9.7 O | CO ₂ (35%) = | 35.3 | , | | Methane High | CH ₄ (50%) = | 49.8 | CO ₂ (35%) = | 35.2 |
| | O ₂ (0%) = | |) | O2 (0%) = | 0 | Pre-Job | NA NA | | O ₂ (0%)= CH4 (0%) = | 0 | O2 (0%) = | 0 |
| H2S Mix | | | .9 | | | Mid-Job | NA | H2S Mix | | 50 | ` ′ | 996 |
| | H2S (50 ppm) = | 4 | | CO (1000 ppm) = | 991 | Post-Job Screeni | NA ing Data | | H2S (50 ppm) = | 50 | CO (1000 ppm) = | 990 |
| Sample Location | Time | Mercury | VOCs | Meth | nane | Carbon | _ | Oxygen | Hydrogen Sulfide | Barometric Pressure | Temperature | Humidity |
| ID | hr:min | Hg | % | volume in air (%) | % LEL (100% LEL = 5% | % | | % | ppm-v | in-Hg | °F | % |
| I-09 | 14:24 | ug/m3 NM | 0 | 0.0 | CH4) 0 | 0. | 0 | 20.6 | 0 | 29.98 | 71.0 | 66.2 |
| I-10 | 14:27 | NM | 0 | 0.0 | 0 | 0. | | 20.6 | 0 | 29.98 | 70.8 | 69.8 |
| I-11 | 14:30 | NM | 0 | 0.0 | 0 | 0. | | 20.6 | 0 | 29.98 | 70.8 | 82.6 |
| I-12 | 14:33 | NM | 0 | 0.0 | 0 | 0. | | 20.7 | 0 | 29.98 | 71.9 | 62.8 |
| I-13 | 14:36 | NM | 0 | 0.0 | 0 | 0. | | 20.7 | 0 | 29.95 | 71.7 | 61.6 |
| J-13 | 14:39 | NM | 0 | 0.0 | 0 | 0. | | 20.7 | 0 | 29.95 | 72.3 | 59.6 |
| J-12 | 14:42 | NM | 0 | 0.0 | 0 | 0. | | 20.7 | 0 | 29.96 | 74.8 | 54.9 |
| J-11 | 14:45 | NM | 0 | 0.0 | 0 | 0. | | 20.7 | 0 | 29.96 | 71.7 | 59.3 |
| J-10 | 14:48 | NM | 0 | 0.0 | 0 | 0. | | 20.6 | 0 | 29.96 | 71.7 | 61.8 |
| J-09 | 14:51 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.96 | 71.0 | 62 |
| J-08 | 14:54 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.96 | 71.0 | 61.4 |
| J-07 | 14:57 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.98 | 70.1 | 61.6 |
| J-06 | 15:00 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.98 | 69.4 | 62.7 |
| J-05 | 15:03 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.8 | 0 | 29.98 | 68.5 | 63.5 |
| J-04 | 15:06 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.8 | 0 | 29.98 | 73.0 | 58.5 |
| J-03 | 15:09 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.8 | 0 | 29.98 | 75.2 | 53.6 |
| J-02 | 15:12 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.8 | 0 | 29.98 | 76.1 | 52 |
| J-01 | 15:15 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.98 | 76.6 | 50 |
| Duplicate-03 | 15:25 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.98 | 73.4 | 51.2 |
| Duplicate-04 | 15:35 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.98 | 74.1 | 52.4 |
| BG-01 | 15:45 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.8 | 0 | 29.96 | 72.3 | 53.4 |
| BG-02 | 15:50 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.7 | 0 | 29.96 | 72.8 | 53.2 |
| BG-03 | 16:00 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.98 | 72.5 | 55.6 |
| me James Waters | | Signature | C .00 . A- | C1. Water | | Date 4/9/2024 | Notes: | Duplicate-03 is taken | at D-03. Duplicate-04 | is taken at H-08. | | |

| | | | | LAND | FILL GAS SCR | EENING | FORM | | | | | 8 |
|-------------------|-------------------------|-------------|--------------|--------------------------|---------------------------------|----------------------|---------------|-----------------------|-------------------------|----------------------------|--------------------------|-----------------|
| Project Name: | Cliffdale | Landfill | | Location: | 7581 Lowell Harris | Rd. Fayettev | ille, NC | Meter 1 | Гуре/ Meter Name/ Se | erial No.: | | m = |
| NCDEQ ID No.: | NCD980 | 502900 | | Date: | 4/9, | /2024 | | Gas Analyzer | GEM 5000 | G500537 | | $\mathcal{M} =$ |
| S&ME Project No.: | 2305 | 0459 | | Weather: | Ove | ercast | | PID | Mini RAE 3000 | 592-603681 | Mid Critique Time: | 1240 |
| Task Order: | 2900 | RI-1 | | S&ME Personnel: | James Waters | s, Connor Hic | :ks | Thermo Hygrometer | PROTMEX | H11I-H17911 | Post Critique Time: | 1615 |
| | | N | 1id Job Equi | pment Critique | | | | | ı | ost Job Equipment Critiqu | | |
| PID (Isobutylene) | 0 ppm = | (|) | 100 ppm = | 100.8 | No Mercu | ury Meter | PID (Isobutylene) | 0 ppm = | 0 | 100 ppm = | 99.4 |
| Fresh Air | CH ₄ (0%) = | (|) | O ₂ (20.9%) = | 20.5 | | | Fresh Air | CH ₄ (0%) = | 0 | O ₂ (20.9%) = | 20.7 |
| Methane High | CH ₄ (50%) = | 49 | 9.7 | CO ₂ (35%) = | 35.3 | Zero Calibrat | tion/Critique | Methane High | CH ₄ (50%) = | 49.8 | CO ₂ (35%) = | 35.2 |
| methane ringin | O ₂ (0%) = | (|) | | | Pre-Job | NA | eanane riigi | O ₂ (0%)= | 0 | | |
| H2S Mix | CH4 (0%) = | (| ס | O2 (0%) = | 0 | Mid-Job | NA | H2S Mix | CH4 (0%) = | 0 | O2 (0%) = | 0 |
| H23 IVIIX | H2S (50 ppm) = | 4 | .9 | CO (1000 ppm) = | 991 | Post-Job | NA | HZ3 IVIIX | H2S (50 ppm) = | 50 | CO (1000 ppm) = | 996 |
| | | | | | | Screen | ing Data | | | | | |
| Sample Location | Time | Mercury | VOCs | Meti | | Carbon | Dioxide | Oxygen | Hydrogen Sulfide | Barometric Pressure | Temperature | Humidity |
| ID | hr:min | Hg ug/m3 | % | volume in air (%) | % LEL (100% LEL = 5% CH4) | % | 6 | % | ppm-v | in-Hg | °F | % |
| BG-04 | 16:10 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.98 | 73.2 | 52.9 |
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| | | | | | | | | | | | | |
| | | Signston | | | | Data | Notos | Duplicate-03 is taken | at D-03 Dunlicate 04 | is taken at H-∩º | | |
| ame James Waters | | Signature | Jan | La. Wate | | Date 4/9/2024 | NOTES: | Daplicate-05 is taken | at 5-03. Duplicate-04 | 13 taken at 11-VO. | | |

| | | | | LAND | FILL GAS SCR | EENING | FORM | | | | | & |
|-------------------|---------------------------------|-------------|------|--------------------------|---------------------------------|---------------|-----------|-----------------------|-------------------------|---------------------------|--------------------------|----------------|
| Project Name: | Cliffdale | Landfill | | Location: | 7581 Lowell Harris | Rd. Fayettev | ville, NC | Meter 1 | Гуре/ Meter Name/ Se | erial No.: | | $\mathbf{m} =$ |
| NCDEQ ID No.: | NCD980 | 502900 | | Date: | 4/10 | /2024 | | Gas Analyzer | GEM 5000 | G500537 | | $\mathbf{H} =$ |
| S&ME Project No.: | 2305 | 0459 | | Weather: | Ove | ercast | | PID | Mini RAE 3000 | 592-603681 | Pre Calibration Time: | 900 |
| Task Order: | 2900 | DRI-1 | | S&ME Personnel: | James Waters | s, Connor Hic | ks | Thermo Hygrometer | PROTMEX | H11I-H17911 | Mid Critique Time: | 1240 |
| | | 1 | | ment Calibration | | | | | ı | Mid Job Equipment Critiqu | | |
| PID (Isobutylene) | 0 ppm = | |) | 100 ppm = | 100 | No Mercu | ury Meter | PID (Isobutylene) | 0 ppm = | 0 | 100 ppm = | 98.6 |
| Fresh Air | CH ₄ (0%) = | (| | O ₂ (20.9%) = | 20.9 | | | Fresh Air | CH ₄ (0%) = | 0 | O ₂ (20.9%) = | 20.4 |
| Methane High | CH ₄ (50%) = | 5 | | CO ₂ (35%) = | 35 | | | Methane High | CH ₄ (50%) = | 50 | CO ₂ (35%) = | 35 |
| | O ₂ (0%) = | (| | | | Pre-Job NA | | | O ₂ (0%)= | 0 | | |
| H2S Mix | CH4 (0%) = | (| | O2 (0%) = | 0 | Mid-Job | NA | H2S Mix | CH4 (0%) = | 0 | O2 (0%) = | 0 |
| | H2S (50 ppm) = | 5 | 0 | CO (1000 ppm) = | 1000 | Post-Job | NA | | H2S (50 ppm) = | 50 | CO (1000 ppm) = | 999 |
| | _ | I | | | | | ing Data | | | | | |
| Sample Location | Time | Mercury | VOCs | Meti | nane % LEL | Carbon | Dioxide | Oxygen | Hydrogen Sulfide | Barometric Pressure | Temperature | Humidity |
| ID | hr:min | Hg ug/m3 | % | volume in air (%) | % LEL (100% LEL = 5% CH4) | 9 | 6 | % | ppm-v | in-Hg | °F | % |
| BG-01 | 09:35 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.3 | 0 | 29.98 | 70.8 | 69.4 |
| BG-02 | 09:45 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.4 | 0 | 29.92 | 70.7 | 68.6 |
| BG-03 | 09:55 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.4 | 0 | 29.92 | 70.7 | 68.6 |
| BG-04 | 10:00 | NM | 0 | 0.0 | 0 | 0.0 | | 20.5 | 0 | 29.92 | 70.5 | 69.2 |
| K-01 | 10:10 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.6 | 0 | 29.90 | 74.4 | 62.8 |
| K-02 | 10:14 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.6 | 0 | 29.99 | 74.8 | 61.4 |
| K-03 | 10:18 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.5 | 0 | 29.99 | 71.6 | 68.6 |
| K-04 | 10:22 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.6 | 0 | 29.99 | 74.6 | 60.9 |
| K-05 | 10:26 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.6 | 0 | 29.99 | 74.3 | 63.8 |
| K-06 | 10:30 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.6 | 0 | 29.99 | 72.6 | 64.9 |
| K-07 | 10:34 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.6 | 0 | 29.93 | 73.7 | 66.1 |
| K-08 | 10:38 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.6 | 0 | 29.93 | 73.5 | 64.9 |
| K-09 | 10:42 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.6 | 0 | 29.93 | 73.4 | 64.9 |
| K-10 | 10:46 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.6 | 0 | 29.93 | 73.4 | 64.2 |
| K-11 | 10:50 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.6 | 0 | 29.93 | 72.8 | 65.9 |
| K-12 | 10:54 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.6 | 0 | 29.93 | 74.4 | 64.4 |
| K-13 | 10:58 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.93 | 75.7 | 60.9 |
| K-14 | 11:02 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.92 | 74.8 | 62.5 |
| L-14 | 11:06 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.92 | 73.5 | 62.5 |
| L-13 | 11:10 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.92 | 73.5 | 72.7 |
| L-12 | 11:14 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.92 | 73.7 | 64.6 |
| L-11 | 11:20 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.94 | 7.6 | 63.7 |
| L-10 | 11:24 | NM | 0 | 0.0 | 0 | 0. | .0 | 20.7 | 0 | 29.94 | 72.6 | 64.6 |
| me | James Waters Signature Da 4/10/ | | | | | | | Duplicate-05 is taken | at K-04. Duplicate-06 | is taken at M-11. | • | |

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| | | | | LAND | FILL GAS SCR | EENING | FORM | | | | | 8 |
|-------------------|-------------------------|-------------|------|--------------------------|---------------------------------|---------------|-----------|-----------------------|-------------------------|---------------------------|--|----------------|
| Project Name: | Cliffdale | Landfill | | Location: | 7581 Lowell Harris | Rd. Fayettev | ille, NC | Meter 1 | Гуре/ Meter Name/ Se | erial No.: | | |
| NCDEQ ID No.: | NCD980 | 502900 | | Date: | 4/10 |)/2024 | | Gas Analyzer | GEM 5000 | G500537 | | $\mathbf{H} =$ |
| S&ME Project No.: | 2305 | 0459 | | Weather: | Ove | ercast | | PID | Mini RAE 3000 | 592-603681 | Pre Calibration Time: | 900 |
| Task Order: | 2900 | ORI-1 | | S&ME Personnel: | James Water | s, Connor Hic | ks | Thermo Hygrometer | PROTMEX | H11I-H17911 | Mid Critique Time: | 1240 |
| | _ | 1 | | ment Calibration | | | | | l | Mid Job Equipment Critiqu | | |
| PID (Isobutylene) | 0 ppm = | (| | 100 ppm = | 100 | No Mercu | ıry Meter | PID (Isobutylene) | 0 ppm = | 0 | 100 ppm = | 98.6 |
| Fresh Air | CH ₄ (0%) = | (| | O ₂ (20.9%) = | 20.9 | | | Fresh Air | CH ₄ (0%) = | 0 | O ₂ (20.9%) = | 20.4 |
| Methane High | CH ₄ (50%) = | 5 | | CO ₂ (35%) = | 35 | Zero Calibrat | | Methane High | CH ₄ (50%) = | 50 | CO ₂ (35%) = | 35 |
| | O ₂ (0%) = | (| | | | Pre-Job | NA | - | O ₂ (0%)= | 0 | | |
| H2S Mix | CH4 (0%) = | (| | O2 (0%) = | 0 | Mid-Job | NA | H2S Mix | CH4 (0%) = | | O2 (0%) = | 0 |
| | H2S (50 ppm) = | 5 | 0 | CO (1000 ppm) = | 1000 | Post-Job | NA | | H2S (50 ppm) = | 50 | CO (1000 ppm) = | 999 |
| Samuela La di | | I | Ve - | | | | ng Data | | Hadrana 6 16 : | Barramatal B | | 11 |
| Sample Location | Time | Mercury | VOCs | Meti | % LEL | Carbon | Dioxide | Oxygen | Hydrogen Sulfide | Barometric Pressure | Temperature | Humidity |
| ID | hr:min | Hg ug/m3 | % | volume in air (%) | % LEL (100% LEL = 5% CH4) | % | 5 | % | ppm-v | in-Hg | °F | % |
| L-09 | 11:28 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.7 | 0 | 29.94 | 72.6 | 62.8 |
| L-08 | 11:32 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.7 | 0 | 29.94 | 73.4 | 66.5 |
| L-07 | 11:36 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.8 | 0 | 29.94 | 73.7 | 63.1 |
| L-06 | 11:40 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.8 | 0 | 29.94 | 72.3 | 65.5 |
| L-05 | 11:44 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.7 | 0 | 29.83 | 74.1 | 63.7 |
| L-04 | 11:48 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.8 | 0 | 29.83 | 76.6 | 62.5 |
| L-03 | 11:52 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.8 | 0 | 29.83 | 77.5 | 67.7 |
| L-02 | 11:56 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.8 | 0 | 29.83 | 76.4 | 58.3 |
| L-01 | 12:00 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.8 | 0 | 29.83 | 81.8 | 50.1 |
| M-04 | 12:56 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.3 | 0 | 29.84 | 78.4 | 54.5 |
| M-05 | 13:00 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.3 | 0 | 29.84 | 78.4 | 66.3 |
| M-06 | 13:04 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.3 | 0 | 29.84 | 73.5 | 63.9 |
| M-07 | 13:10 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.3 | 0 | 29.84 | 73.4 | 67 |
| M-08 | 13:14 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.3 | 0 | 29.84 | 74.3 | 64.5 |
| M-09 | 13:18 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.3 | 0 | 29.87 | 73.4 | 66.8 |
| M-10 | 13:22 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.87 | 73.2 | 64.8 |
| M-11 | 13:26 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.87 | 73.2 | 64.8 |
| M-12 | 13:30 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.87 | 73.2 | 64.8 |
| M-13 | 13:34 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.88 | 75.5 | 62.2 |
| M-14 | 13:38 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.87 | 76.8 | 60.9 |
| M-15 | 13:42 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.5 | 0 | 29.87 | 77.5 | 63.2 |
| N-15 | 13:46 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.5 | 0 | 29.87 | 75.2 | 66.1 |
| N-14 | 13:50 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.5 | 0 | 29.87 | 74.3 | 66.2 |
| ame | | Signature | 1 | - C1. Water | _ | Date | Notes: | Duplicate-05 is taken | at K-04. Duplicate-06 | is taken at M-11. | <u>, </u> | |

| | | | | LAND | FILL GAS SCR | EEMING | FURIVI | | | | | 8 |
|-------------------|--|-------------|---------------------|---------------------------------------|---------------------------------|---------------------|----------------|--------------------|---|----------------------------|--------------------------|-----------|
| Project Name: | Cliffdale | Landfill | | Location: | 7581 Lowell Harris | Rd. Fayettev | ille, NC | Meter ⁻ | Type/ Meter Name/ Se | erial No.: | | 111 = |
| NCDEQ ID No.: | NCD980 | 0502900 | | Date: | 4/10 | /2024 | | Gas Analyzer | GEM 5000 | G500537 | | $\mu u =$ |
| S&ME Project No.: | 2305 | 0459 | | Weather: | Ove | ercast | | PID | Mini RAE 3000 | 592-603681 | Mid Critique Time: | 1240 |
| Task Order: | 2900 | | | S&ME Personnel: | James Waters | s, Connor Hic | ks | Thermo Hygrometer | PROTMEX | H11I-H17911 | Post Critique Time: | 1540 |
| PID (Isobutylene) | 0 ppm = | 1 | 1id Job Equi | pment Critique | 98.6 | No Mercu | un Motor | PID (Isobutylene) | 0 ppm = | Post Job Equipment Critiqu | 100 ppm = | 100.7 |
| Fresh Air | CH ₄ (0%) = | |) | 100 ppm = O ₂ (20.9%) = | 20.4 | NO MERCE | iry ivieter | Fresh Air | CH ₄ (0%) = | 0 | | 20.5 |
| FIESTI ATI | | | 0 | _ | | Zero Calibrat | ion/Critiana | FIESH All | | | O ₂ (20.9%) = | |
| Methane High | CH ₄ (50%) = O ₂ (0%) = | |) | CO ₂ (35%) = | 35 | Pre-Job | NA | Methane High | CH ₄ (50%) = O ₂ (0%)= | 50.2 0 | CO ₂ (35%) = | 34.8 |
| | CH4 (0%) = | |) | O2 (0%) = | 0 | - | | | O ₂ (0%)= CH4 (0%) = | | O2 (0%) = | 0 |
| H2S Mix | | | 0 | CO (1000 ppm) = | 999 | Mid-Job Post-Job | NA | H2S Mix | H2S (50 ppm) = | | | 993 |
| | H2S (50 ppm) = | 3 | | CO (1000 ppm) = | 999 | | NA ing Data | | H23 (30 ppiii) = | 51 | CO (1000 ppm) = | 993 |
| Sample Location | Time | Mercury | VOCs | Meti | | | Dioxide | Oxygen | Hydrogen Sulfide | Barometric Pressure | Temperature | Humidity |
| ID | hr:min | Hg ug/m3 | % | volume in air (%) | % LEL (100% LEL = 5% CH4) | 9 | 6 | % | ppm-v | in-Hg | °F | % |
| N-13 | 13:54 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.5 | 0 | 29.87 | 72.5 | 72.9 |
| N-12 | 13:58 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.5 | 0 | 29.87 | 73.4 | 70 |
| N-11 | 14:02 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.6 | 0 | 29.87 | 73.5 | 73 |
| N-10 | 14:06 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.5 | 0 | 29.87 | 74.3 | 73 |
| N-09 | 14:10 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.6 | 0 | 29.87 | 75.7 | 71 |
| N-08 | 14:14 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.6 | 0 | 29.87 | 75.0 | 71.8 |
| N-07 | 14:18 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.6 | 0 | 29.86 | 76.2 | 69.9 |
| N-06 | 14:22 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.6 | 0 | 29.86 | 76.6 | 57.5 |
| N-05 | 14:26 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.6 | 0 | 29.86 | 77.7 | 58.2 |
| N-04 | 14:30 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.6 | 0 | 29.86 | 81.8 | 59.3 |
| Duplicate-05 | 14:40 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.86 | 80.3 | 53.1 |
| Duplicate-06 | 14:50 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.86 | 80.8 | 51.5 |
| BG-01 | 15:05 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.3 | 0 | 29.84 | 80.4 | 49.7 |
| BG-02 | 15:10 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.3 | 0 | 29.84 | 77.5 | 53 |
| BG-03 | 15:20 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.5 | 0 | 29.84 | 87.6 | 39.4 |
| BG-04 | 15:30 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.5 | 0 | 20.84 | 85.4 | 42.2 |
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| | | | | LAND | FILL GAS SCR | EENING | FORM | | | | | 8 |
|-------------------|-------------------------|-------------|--------------|--------------------------|---------------------------------|-----------------------|--------------|-----------------------|-------------------------|---------------------------|--------------------------|----------------|
| Project Name: | Cliffdale | Landfill | | Location: | 7581 Lowell Harris | Rd. Fayettev | ille, NC | Meter ⁻ | Гуре/ Meter Name/ Se | erial No.: | | III = |
| NCDEQ ID No.: | NCD980 | 502900 | | Date: | 4/11 | /2024 | | Gas Analyzer | GEM 5000 | G500537 | | $\mathbf{H} =$ |
| &ME Project No.: | 2305 | 0459 | | Weather: | Intermi | ttent Rain | | PID | Mini RAE 3000 | 592-603681 | Pre Calibration Time: | 900 |
| Task Order: | 2900 | RI-1 | | S&ME Personnel: | James Waters | s, Connor Hic | ks | Thermo Hygrometer | PROTMEX | H11I-H17911 | Post Critique Time: | 1340 |
| | | Pre | e Job Equipr | ment Calibration | | | | | F | ost Job Equipment Critiqu | ue | |
| D (Isobutylene) | 0 ppm = | (|) | 100 ppm = | 100 | No Mercu | ıry Meter | PID (Isobutylene) | 0 ppm = | 0 | 100 ppm = | 99.5 |
| Fresh Air | CH ₄ (0%) = | (|) | O ₂ (20.9%) = | 20.9 | | | Fresh Air | CH ₄ (0%) = | 0 | O ₂ (20.9%) = | 20.5 |
| Methane High | CH ₄ (50%) = | 5 | 0 | CO ₂ (35%) = | 35 | Zero Calibrat | ion/Critique | Methane High | CH ₄ (50%) = | 49.6 | CO ₂ (35%) = | 35.6 |
| | O ₂ (0%) = | (|) | | | Pre-Job | NA | | O ₂ (0%)= | 0 | | |
| H2S Mix | CH4 (0%) = | (|) | O2 (0%) = | 0 | Mid-Job | NA | H2S Mix | CH4 (0%) = | 0 | O2 (0%) = | 0 |
| TIES WIIX | H2S (50 ppm) = | 5 | 0 | CO (1000 ppm) = | 1000 | Post-Job | NA | TIES WIIX | H2S (50 ppm) = | 50 | CO (1000 ppm) = | 993 |
| | | | | | | | ng Data | | | | | |
| mple Location | Time | Mercury | VOCs | Meth | | Carbon | Dioxide | Oxygen | Hydrogen Sulfide | Barometric Pressure | Temperature | Humidity |
| ID | hr:min | Hg ug/m3 | % | volume in air (%) | % LEL (100% LEL = 5% CH4) | % | 6 | % | ppm-v | in-Hg | °F | % |
| BG-01 | 09:35 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.1 | 0 | 29.54 | 69.6 | 84.7 |
| BG-02 | 09:45 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.2 | 0 | 29.54 | 69.6 | 85.3 |
| BG-03 | 09:55 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.2 | 0 | 29.53 | 71.7 | 77.4 |
| BG-04 | 10:00 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.3 | 0 | 29.53 | 72.3 | 78.1 |
| Q-19 | 10:20 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.5 | 0 | 29.54 | 69.0 | 90.5 |
| Q-18 | 10:24 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.5 | 0 | 29.54 | 69.8 | 86.6 |
| Q-17 | 10:28 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.54 | 70.1 | 86.5 |
| Q-16 | 10:32 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.54 | 70.1 | 88 |
| Q-15 | 10:36 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.54 | 69.8 | 86.7 |
| Q-14 | 10:40 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.52 | 70.7 | 85.1 |
| Q-13 | 10:44 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.52 | 69.8 | 86.9 |
| Q-12 | 10:48 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.52 | 70.1 | 87.3 |
| Q-11 | 10:52 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.52 | 69.4 | 87.2 |
| Q-10 | 10:56 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.52 | 69.6 | 88 |
| Q-09 | 11:00 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.53 | 69.9 | 87.1 |
| Q-08 | 11:04 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.53 | 69.4 | 88.3 |
| Q-07 | 11:08 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.53 | 69.8 | 87.1 |
| Q-06 | 11:12 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.53 | 70.4 | 85.4 |
| Q-05 | 11:16 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.63 | 70.7 | 85.1 |
| Q-04 | 11:20 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.5 | 0 | 29.53 | 70.3 | 85.5 |
| P-04 | 11:24 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.52 | 72.6 | 83.9 |
| P-05 | 11:28 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.52 | 71.9 | 82.7 |
| P-06 | 11:32 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.52 | 70.7 | 87.3 |
| e James Waters | | Signature | 7. m . h . | C1. Water | - | Date 4/11/2024 | Notes: | Duplicate-07 is taken | at O-04. Duplicate-08 | is taken at P-11. | | |

| | | | | | FORM | EENING | FILL GAS SCR | LAND | | | | |
|-------------------------------|-----------------------|----------------------------|------------------------------------|-------------------------|--|----------------|---------------------------------|--------------------------|------|-------------|-------------------------|-------------------|
| 111 | | erial No.: | ype/ Meter Name/ Se | Meter T | lle, NC | Rd. Fayettevi | 7581 Lowell Harris | Location: | | Landfill | Cliffdale | Project Name: |
| 111 | | G500537 | GEM 5000 | Gas Analyzer | | /2024 | 4/11 | Date: | | 502900 | NCD980 | NCDEQ ID No.: |
| Calibration Time: 900 | Pre Calibration Ti | 592-603681 | Mini RAE 3000 | PID | | tent Rain | Intermi | Weather: | | 0459 | 2305 | S&ME Project No.: |
| st Critique Time: 1340 | Post Critique Ti | H11I-H17911 | Thermo Hygrometer PROTMEX H11I-H17 | | <s .<="" td=""><td>, Connor Hicl</td><td>James Water</td><td>S&ME Personnel:</td><td></td><td>RI-1</td><td>2900</td><td>Task Order:</td></s> | , Connor Hicl | James Water | S&ME Personnel: | | RI-1 | 2900 | Task Order: |
| | | Post Job Equipment Critiqu | P | | | | | nent Calibration | | | | |
| 100 ppm = 99.5 | 100 ppr | 0 | 0 ppm = | PID (Isobutylene) | ry Meter | No Mercu | 100 | 100 ppm = |) | (| 0 ppm = | PID (Isobutylene) |
| O ₂ (20.9%) = 20.5 | O ₂ (20.9% | 0 | CH ₄ (0%) = | Fresh Air | | | 20.9 | O ₂ (20.9%) = |) | (| CH ₄ (0%) = | Fresh Air |
| CO ₂ (35%) = 35.6 | CO ₂ (35% | 49.6 | CH ₄ (50%) = | Methane High | on/Critique | Zero Calibrati | 35 | CO ₂ (35%) = | 0 | 5 | CH ₄ (50%) = | Methane High |
| | | 0 | O ₂ (0%)= | | NA | Pre-Job | | |) | (| O ₂ (0%) = | |
| O2 (0%) = 0 | O2 (0% | 0 | CH4 (0%) = | H2S Mix | NA | Mid-Job | 0 | O2 (0%) = |) | (| CH4 (0%) = | H2S Mix |
| (1000 ppm) = 993 | CO (1000 ppm | 50 | H2S (50 ppm) = | 1125 MIX | NA | Post-Job | 1000 | CO (1000 ppm) = | 0 | 5 | H2S (50 ppm) = | 1125 11111 |
| | | | | | _ | Screeni | | | | | | |
| nperature Humid | Temperature | Barometric Pressure | Hydrogen Sulfide | Oxygen | Dioxide | Carbon I | | Meth | VOCs | Mercury | Time | Sample Location |
| °F % | °F | in-Hg | ppm-v | % | | % | % LEL (100% LEL = 5% CH4) | volume in air (%) | % | Hg ug/m3 | hr:min | ID |
| 71.2 85.2 | 71.2 | 29.53 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 11:35 | P-07 |
| 71.2 86 | 71.2 | 29.53 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 11:38 | P-08 |
| 71.6 88 | 71.6 | 29.53 | 0 | 20.5 |) | 0.0 | 0 | 0.0 | 0 | NM | 11:41 | P-09 |
| 71.4 84.8 | 71.4 | 29.53 | 0 | 20.5 |) | 0.0 | 0 | 0.0 | 0 | NM | 11:44 | P-10 |
| 73.0 84.8 | 73.0 | 29.53 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 11:47 | P-11 |
| 71.7 83.4 | 71.7 | 29.53 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 11:50 | P-12 |
| 71.7 87.3 | 71.7 | 29.55 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 11:53 | P-13 |
| 71.6 88.1 | 71.6 | 29.55 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 11:56 | P-14 |
| 71.9 85.5 | 71.9 | 29.55 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 11:59 | P-15 |
| 72.1 84.6 | 72.1 | 29.55 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 12:02 | P-16 |
| 72.8 83.1 | 72.8 | 29.55 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 12:05 | P-17 |
| 73.0 81 | 73.0 | 29.56 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 12:08 | P-18 |
| 75.2 75.6 | 75.2 | 29.56 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 12:11 | O-17 |
| 75.3 76 | 75.3 | 29.56 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 12:14 | O-16 |
| 75.2 80.4 | 75.2 | 29.56 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 12:17 | O-15 |
| 73.7 81.6 | 73.7 | 29.56 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 12:20 | O-14 |
| 73.4 86.3 | 73.4 | 29.56 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 12:23 | O-13 |
| 73.4 81.8 | 73.4 | 29.52 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 12:26 | O-12 |
| 72.8 79.7 | 72.8 | 29.52 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 12:29 | O-11 |
| 72.5 80.3 | 72.5 | 29.52 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 12:32 | O-10 |
| 73.0 80.6 | 73.0 | 29.52 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 12:35 | O-09 |
| 73.9 86.8 | 73.9 | 29.52 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 12:38 | O-08 |
| 74.8 79.5 | 74.8 | 29.52 | 0 | 20.4 |) | 0.0 | 0 | 0.0 | 0 | NM | 12:41 | O-07 |
| - | | is taken at P-11. | at O-04. Duplicate-08 | Duplicate-07 is taken a | Notes: | Date I | - | C1. Watry | ame | Signature | | James Waters |

| | | | | LAND | FILL GAS SCR | EENING | FORM | | | | | 8 |
|-------------------|-------------------------|-------------|------|--------------------------|---------------------------------|---------------|--------------|-----------------------|-------------------------|----------------------------|--------------------------|----------|
| Project Name: | Cliffdale | Landfill | | Location: | 7581 Lowell Harris | Rd. Fayettev | ille, NC | Meter 1 | Type/ Meter Name/ Se | erial No.: | | m = |
| NCDEQ ID No.: | NCD980 | 502900 | | Date: | 4/11 | /2024 | | Gas Analyzer | GEM 5000 | G500537 | | M = |
| S&ME Project No.: | 2305 | 0459 | | Weather: | Intermit | tent Rain | | PID | Mini RAE 3000 | 592-603681 | Pre Calibration Time: | 900 |
| Task Order: | 2900 | DRI-1 | | S&ME Personnel: | James Waters | s, Connor Hic | ks | Thermo Hygrometer | PROTMEX | H11I-H17911 | Post Critique Time: | 1340 |
| | | 1 | | nent Calibration | | | | | | Post Job Equipment Critiqu | | |
| PID (Isobutylene) | 0 ppm = | |) | 100 ppm = | 100 | No Mercu | ry Meter | PID (Isobutylene) | 0 ppm = | 0 | 100 ppm = | 99.5 |
| Fresh Air | CH ₄ (0%) = | |) | O ₂ (20.9%) = | 20.9 | | | Fresh Air | CH ₄ (0%) = | 0 | O ₂ (20.9%) = | 20.5 |
| Methane High | CH ₄ (50%) = | 5 | 0 | CO ₂ (35%) = | 35 | Zero Calibrat | ion/Critique | Methane High | CH ₄ (50%) = | 49.6 | CO ₂ (35%) = | 35.6 |
| | O ₂ (0%) = | (|) | | | Pre-Job | NA | | O ₂ (0%)= | 0 | | |
| H2S Mix | CH4 (0%) = | (|) | O2 (0%) = | 0 | Mid-Job | NA | H2S Mix | CH4 (0%) = | 0 | O2 (0%) = | 0 |
| 1125 11111 | H2S (50 ppm) = | 5 | 0 | CO (1000 ppm) = | 1000 | Post-Job | NA | 1120 11111 | H2S (50 ppm) = | 50 | CO (1000 ppm) = | 993 |
| | | | | | | | ng Data | | | | | |
| Sample Location | Time | Mercury | VOCs | Meti | | Carbon I | Dioxide | Oxygen | Hydrogen Sulfide | Barometric Pressure | Temperature | Humidity |
| ID | hr:min | Hg ug/m3 | % | volume in air (%) | % LEL (100% LEL = 5% CH4) | % | | % | ppm-v | in-Hg | °F | % |
| O-06 | 12:44 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.4 | 0 | 29.53 | 71.2 | 85.2 |
| O-05 | 12:47 | NM | 0 | 0.0 | 0 | 0.0 | 0 | 20.4 | 0 | 29"52 | 74.3 | 75.2 |
| O-04 | 12:50 | NM | 0 | 0.0 | 0 | 0. |) | 20.4 | 0 | 29.52 | 81.1 | 61.5 |
| Duplicate-07 | 13:00 | NM | 0 | 0.0 | 0 | 0. |) | 20.4 | 0 | 29.52 | 79.5 | 63.8 |
| Duplicate-08 | 13:10 | NM | 0 | 0.0 | 0 | 0.0 | 0 | 20.4 | 0 | 29.52 | 78.1 | 65.2 |
| BG-01 | 13:20 | NM | 0 | 0.0 | 0 | 0. | 0 | 20.5 | 0 | 29.53 | 76.8 | 67 |
| BG-02 | 13:15 | NM | 0 | 0.0 | 0 | 0.0 | 0 | 20.5 | 0 | 29.53 | 75.0 | 70.6 |
| BG-03 | 13:25 | NM | 0 | 0.0 | 0 | 0.0 | 0 | 20.5 | 0 | 29.53 | 75.0 | 72.9 |
| BG-04 | 13:30 | NM | 0 | 0.0 | 0 | 0. |) | 20.5 | 0 | 29.53 | 74.8 | 73.6 |
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| lame | | Signature | | | | Date | Notes: | Duplicate-07 is taken | at O-04. Duplicate-08 | is taken at P-11. | | |
|) James Water | rs | <u> </u> | ans | G. Watry | <u> </u> | 4/11/2024 | | | | | | |