Revised MP5 and MP11 Focused Biogas Remedial Investigation Work Plan

Millpond Crossing Development
1701 Chapel Drive
Philomath, Oregon
DEQ ECSI Site 6296

Prepared for:
Millpond Crossing, LLC and MPC Builders, LLC
2711 E Main Street
Puyallup, Washington 98372

January 2023
PBS Project 24159.000

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Supporting Data

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1 INTRODUCTION

PBS Engineering and Environmental Inc. (PBS) has prepared this work plan on behalf of Millpond Crossing, LLC and MPC Builders, LLC (Client), to conduct additional assessment of subsurface methane concentrations across the Millpond Crossing Development in Philomath, Oregon (site; Figures 1 and 2). This work plan documents the planning, implementation, and procedures for assessment and has been designed to address comments from the Oregon Department of Environmental Quality (DEQ) provided in a Consent Order dated July 27, 2021, and revisions to the subsequent amendments.

Modifications to the work plan scope of work, if necessary, will be presented and approved by DEQ staff via email prior to implementation.

2 PROJECT MANAGEMENT

Personnel involved in the project and their respective roles include the following:

Personnel	Organization	Role
Bret Waldron	PBS	Project Manager
Dennis Terzian	PBS	Senior Geologist
Craig Peterson	PBS	Senior Engineer
Elise Kittrell	PBS	Project Engineer
David Rukki	PBS	Field Staff
Caitlin Johnson	PBS	Field Staff
Cary Midwood	PBS	Field Staff
Cody Keyser	Alpha Locates	Private Utility Locates
Various Staff	Holt Drilling Services	Driller for Methane Point Installation

The scope of work detailed in the following sections will result in a focused methane remedial investigation report to be completed approximately four weeks following the completion of proposed monitoring point installation and sampling.

3 BACKGROUND

Methane in soil gas has been encountered across the site at concentrations above 5 percent by volume (pbv) as documented in previous site assessment and remedial investigation reports. The site location, description, history, and geology are documented in previous reports, including the August 2021 Methane Assessment Work Plan and June 2022 Preliminary Methane Remedial Investigation Report, both drafted by PBS, and these sections are not included in this work plan.

4 KNOWN OR SUSPECTED ENVIRONMENTAL CONDITIONS

The generation of biogases originating from the organic fill material emplaced in the former log ponds has resulted in elevated concentrations of methane and hydrogen sulfide (H_2S) in the subsurface. The gases may pose both a risk of consolidation of flammable gas within confined spaces, and a vapor intrusion risk to existing and future residences at the site. Interim remedial measures are underway to remove organic fill material from within the footprint of the former large log pond in the undeveloped portion of the site east of

16th Street. With these actions, the primary risk is anticipated to be to the previously constructed homes that are currently occupied on lots 1 through 62, except lot 40 which is undeveloped (Figure 2).

Previous soil gas monitoring activities have identified elevated concentrations of methane in soil gas on the already developed portion. In addition to commencing ongoing monitoring of the previously installed permanent gas probes around the site, DEQ has requested additional remedial investigation occur near monitoring point MP5, located within the footprint of the former small log pond at lot 42, and at MP11, located at lot 25 in an area of elevated methane in the northwest corner. MP5 has exhibited soil gas concentrations of methane generally above 20 percent by volume (pbv) but also as high as 50.7 pbv (January 25, 2022) (see Table 2).

MP11 was removed by the homeowner or another external party sometime between May and October 2021, but prior to its removal the monitoring point exhibited elevated concentrations of soil gas ranging from 21.6 to 30.6 pbv (the highest on May 26, 2021) (Table 2).

Given the proximity of the elevated soil gas concentrations to existing homes, DEQ has requested that additional remedial investigation be completed near these two monitoring points to attempt to better understand the potential risk for vapor intrusion into the crawl space, garage, and indoor living spaces of homes. Additionally, the information will be used to better understand the nature and extent of the methane plumes near MP5 and MP11 and to aid in the development of successful remedial plans for the site.

5 PURPOSE AND OBJECTIVES

The purpose of this scope of work is to complete a Focused Biogas Remedial Investigation (RI), by determining the nature, extent, distribution, and movement of methane and H_2S in site soil and air, and the risks to people exposed to these gases at or adjacent to the property. PBS is currently developing interim remedial action measures that will mitigate potential vapor intrusion issues for the existing homes that will be presented to DEQ under separate cover. It is anticipated that evaluation of remedial alternatives will be conducted in a later scope once sufficient RI and interim remedial measures have been completed, as the interim measures may eliminate or control risk to residents. This work plan addresses requests provided by DEQ Consent Order Number LQVC-WR-21-03, Attachment B, Methane Investigation Scope of Work – Amendment 2, which requested:

1. Investigate soil gas in organic fill and structural fill near MP11 and MP5.
2. Continue accurate documentation of observed organic thickness for organic fill characterization.

Additionally, it aims to install a permanent monitoring point (MP33) north of the site in Willow Street, to satisfy a DEQ request for additional delineation offsite to the north of the area of elevated methane in the northwest portion of the property.

Monitoring points MP2, MP6A, and MP11 which previously were removed by unknown parties, will be replaced with new monitoring points.

6 HEALTH AND SAFETY

A site-specific health and safety plan (HASP) will be reviewed and updated as necessary before commencing fieldwork. Information to ensure safe working practices will be included in the HASP. Special considerations for toxic gases and explosion hazards will be incorporated, with detailed procedures for how to monitor workspaces and explosion mitigation procedures when they are warranted. In all cases, pertinent safety information will be relayed to field personnel, including subcontractors, to communicate mandatory elements from the federal code for hazardous waste operations and emergency response (29 CFR 1910.120(b)(4)).

At PBS, we are committed to keeping our employees, clients, contractors, and communities safe and healthy. All work that PBS employees perform is conducted following federal, state, and local safety guidelines.

7 FIELD PREPARATIONS

PBS will contact the Oregon Utility Notification Center to file a public utility locate request at least two business days in advance of drilling activities to locate underground utility-owned lines up to the meter (for example, water, gas, electric), and underground public utilities within the public right-of-way. Discrete sampling points will be uploaded into a GPS unit for use in the field. PBS will complete a private utility locate to mark lines in the proposed work areas.

8 PROPOSED SCOPE OF WORK

PBS has developed a scope of work to provide further definition of subsurface methane and H_2S concentrations on the western portion of the site where completed residences are located. The scope of work is focused on two primary areas: further delineation of soil gas concentrations where elevated concentrations of methane and H_2S have previously been identified; and further delineation of the volume of buried organic material and structural fill material near the existing residences. Since the sampling activities in this scope of work are limited to field processes and measurements, a separate Sampling and Analysis Plan (SAP) has not been prepared and the following narrative will act in implementation as the site SAP.

8.1 Permanent Methane Point Installation

PBS plans to install a replacement monitoring point at MP11. The replacement monitoring point will be designated MP11A. Also, to satisfy a request made by DEQ for additional delineation north of MP11 and MP10A, PBS will install an additional permanent monitoring point, MP33, north of the site along Willow Street, between MP18 and MP19. MP33 will provide northern delineation of the elevated concentrations in the northwest-area methane pocket. Replacement monitoring points for MP2 and MP6A will also be installed near the former monitoring point locations. These locations are presented in Figure 2.

To evaluate the potential explosive or toxic vapor hazards during drilling activities, the following air monitoring will be conducted:

- The breathing zone and boreholes will be monitored for methane, H_2S, carbon dioxide, and oxygen. The duration and frequency of monitoring will be detailed in the site-specific HASP.

The points will be installed by advancing boreholes using a drill rig using direct-push technology capable of generating a small diameter borehole (anticipated to be 2 to 6 inches in diameter, depending on equipment availability and drilling conditions) to a depth of 7 feet below ground surface (bgs). A standard installation—consisting of 5 feet of 1-inch-diameter schedule 40 polyvinyl chloride (PVC) machine-slotted 40-slot or 20-slot screened casing with 2 feet of blank casing capped with a shut-off valve—will be installed in each location. The resulting annular space will be backfilled with pea gravel to approximately 2 feet bgs and silica sand to approximately 1.5 feet bgs. The point will be sealed with hydrated bentonite from approximately 0.5 to 1.5 feet bgs, overlain by a concrete seal for stability of the point and completed with a flush mount monument. The monitoring point locations will be recorded on a GPS unit. Ambient air temperature within the borehole will be measured within any borings exhibiting steam during completion or overly warm soil cuttings utilizing a field temperature probe.

If significant methane concentrations are measured during drilling activities, the field work will be temporarily halted until methane concentrations return to acceptable levels. The subsurface borings/excavations will be inerted with nitrogen gas if methane concentrations exceed 20% of the lower explosive limit (LEL) (or 1 pbv

methane) and sustained for at least 30 seconds. Drilling or excavation activities will not resume until readings are sufficiently reduced below the action level of 20% LEL.

8.2 MP5 and MP11A Focused Biogas Remedial Investigation

PBS proposes to install a mixture of temporary and permanent monitoring points to delineate soil gas concentrations around MP5 and MP11A. The sampling points will provide definition to the extent of subsurface biogases near the permanent monitoring points and potentially provide useful information in development of remedial plans.

The study will include installation of four monitoring points in cardinal directions around MP5 and MP11A, which will be spaced at least 5 to 10 feet away, as site features allow. Depending on the amount of available room, these bounding points will be attempted to be completed in the intact organic fill material; however, it is anticipated that given MP11A's proximity to the emplaced structural fill material, the southern bounding point will be installed in structural fill material (Figure 4).

In addition to the four temporary monitoring points surrounding MP5 and MP11A in the cardinal directions, a ring of monitoring points will be installed at a 20-foot radius and a 35-foot radius from MP5 and MP11A as indicated on Figures 3 and 4.

Additional points will be installed within the yard spaces as indicated on Figures 3 and 4 to assess for potential vapor migration through the structural fill material around the homes. One temporary monitoring point will be installed in the front yard space at Lot 25 to assess soil gas conditions in the non-structural fill (Figure 4).

Temporary points will be installed by advancing boreholes using a direct-push drill rig and constructed like the permanent monitoring points except for the installation of a permanent monument. Borings will initially be advanced to 7 feet bgs to facilitate collection of soil gas readings. The temporary points will be left to equilibrate for a period of at least 24 hours prior to collecting the soil gas reading discussed in section 8.3.

To characterize the lithology, two additional temporary borings in each study area will be installed immediately adjacent to the temporary soil gas points with one boring in organic fill (to document organic thickness), and the other in structural fill (to document structural fill thickness and underlying lithology). A 2.5-inch Macro-Core sampler will be used to obtain soil cores for logging the lithology. Because the former ponds were less than 15 feet deep, soil borings are planned to be drilled to a depth of 15 feet bgs, or refusal, whichever comes first. PBS will note the type of lithology, relative presence of organic material and/or structural fill, and depths of underlying native soil and will monitor methane, H_2S, and ambient air temperature within the borehole. Field evidence of near surface or surface emissions of biogases, including stressed trees or other deep-rooted vegetation, gas bubbling in standing water, unusual odors (e.g. rotten egg smell for H_2S), will also be listed on the boring logs.

8.3 Methane Point Monitoring

At least 24 hours following installation, the points will be monitored for static pressure and then purged and monitored using a GEM to measure peak and static methane, oxygen, carbon dioxide, barometric pressure, and downhole pressure. Readings will follow the standard operating procedure (SOP) for using the GEM5000, included in Appendix A. If H_2S readings are not detected by the GEM5000, a more sensitive H_2S meter will be used to collect readings at lower reporting limits. Purging of the point will be conducted using a GEM or similar equipment to assure the readings are representative of subsurface soil-gas concentrations and other subsurface conditions. Each point will be purged of approximately two borehole volumes prior to collecting readings.

MP2A, MP5, MP6B, and MP11A will be monitored twice monthly during the routine soil gas monitoring events. New monitoring point MP33 will be monitored twice monthly with the option to reduce to quarterly with DEQ authorization, provided concentration trends are below applicable action levels for at least four consecutive twice monthly monitoring events (2 months). Additional permanent monitoring points installed near MP5 and MP11A will initially be monitored twice monthly with the option to reduce to quarterly with DEQ authorization at a later date.

8.4 Methane Point Decommissioning

Following collection of readings and logging the lithology, the temporary points will be removed and filled with granular bentonite and hydrated in place. The surface of each point will be matched to its surrounding material. Note: landscaping material such as grass may not be able to be replaced. PBS and the drilling contractor will attempt to minimize disturbance to the surface during activities.

8.5 Instrument/Equipment Testing, Inspection, and Maintenance

Field equipment for the baseline assessment will include the following:

- Drill rig
- Hand tools
- GEM portable gas meter
- Portable H_2S meter (Jerome J605, or equivalent)
- Disposable tubing

Maintenance of the drill rig or excavator is the responsibility of the drilling/excavation contractor. Hand tools will be visually inspected and decontaminated prior to use. PBS routinely services the GEM unit through QED Environmental Systems (QED) of Dexter, Michigan, or equivalent. QED performs an annual calibration according to the instrument manufacturer's directions. The portable H_2S meter will be rented from an environmental equipment supply vendor who regularly inspects, calibrates, and maintains the instrument. Calibration documentation will be retained in the project files.

8.6 Inspection/Acceptance of Supplies and Consumables

Materials used in the execution of work will be appropriate and approved for intended uses. The procurement and handling of quality-affecting materials will be controlled to ensure initial and continued conformance with applicable technical requirements and acceptance criteria. These items will be visually inspected before shipment to the field and again before use. Inspection elements will include, as appropriate, a review of physical condition, expiration dates, limitations of use, size and quantity, and quality grade. Materials that do not meet performance specifications will be segregated and labeled to preclude use.

Disposable gloves for project use will be obtained directly from the box provided by the manufacturer. The boxes will be kept clean prior to and during on-site use.

8.7 Quality Assurance/Quality Control

The quality assurance/quality control procedures utilized in completing the scopes of work include the following:

- Annual factory servicing and calibration of portable methane meter(s).
- Field calibration of methane meter(s) prior to each use.

- H_2S meters will be rented and calibrated by the equipment vendor. PBS will retain calibration paperwork for the project file.
- Utilization of a hydrophobic filter in the connection train to ensure water that may be present in probes is not brought into the meter.
- Ensuring proper connections to probes, valve settings, and sufficient purging of probes prior to sample reading.
- Purging of fresh air through meter(s) after each testing event and before proceeding to the next monitoring location.
- Ensuring that all required parameters are collected including static pressure, peak, and steady state gas levels.

8.8 Data Management and Documentation

Project documents and records will be prepared, generated, reviewed, approved, and controlled in accordance with PBS' internal quality assurance and quality control procedures. Hard copies of these records will be provided to the PBS project manager by technical staff and subcontractors in a timely fashion, stored in the PBS project files, and summarized, as needed, for inclusion in reports. The PBS project manager is responsible for maintaining the project files and keeping copies of all generated data in the project files.

9 DELIVERABLES

PBS will provide an electronic copy of the project report to the Client. The report will summarize field activities and include figures showing sample locations, tabulated screening results compared to applicable site-specific screening levels, a discussion of the conceptual site model including current and future receptors, boring logs, and photographs. With the Client's approval, one unbound hard copy and electronic copy of the project report will be provided to DEQ. Electronic copies of all project records and reports will be retained in the PBS Portland office for a period of five years.

Prepared by PBS Engineering and Environmental Inc.

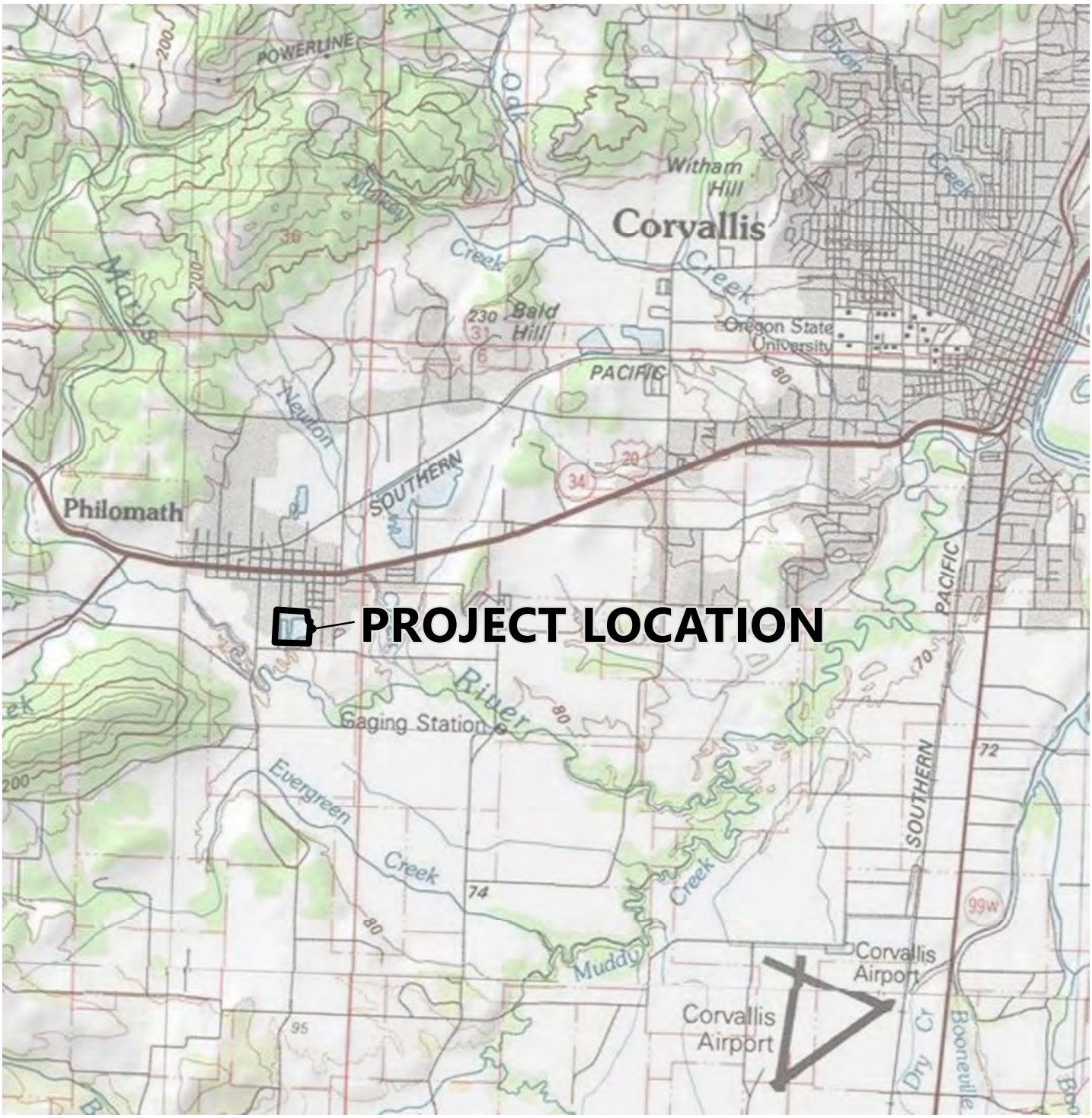
Digitally signed by Bret Waldron
Date: 2023.01.27 17:00:59 -08'00'

Bret Waldron, RG Date
Senior Geologist

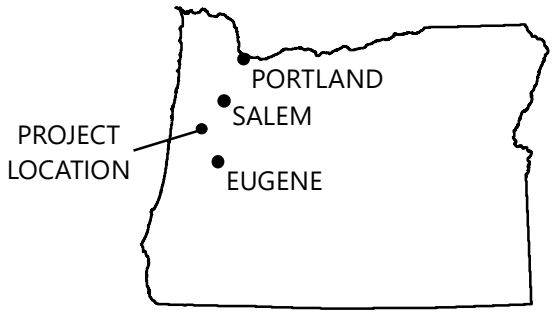
Digitally signed by Dennis Terzian
Date: 2023.01.30 09:03:32 -08'00'

Dennis Terzian, RG Date
Senior Geologist

Figures



SOURCES: USGS NATIONAL MAP
PROJECTION: NAD 2011 OREGON STATEWIDE LAMBERT INTL FT



N

SCALE: 1 " = 1 mile

0 ½ 1 2 Miles

PREPARED FOR: MPC BUILDERS

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PBS

SITE VICINITY

1701 CHAPEL DRIVE
PHILOMATH, OREGON

AUG 2022
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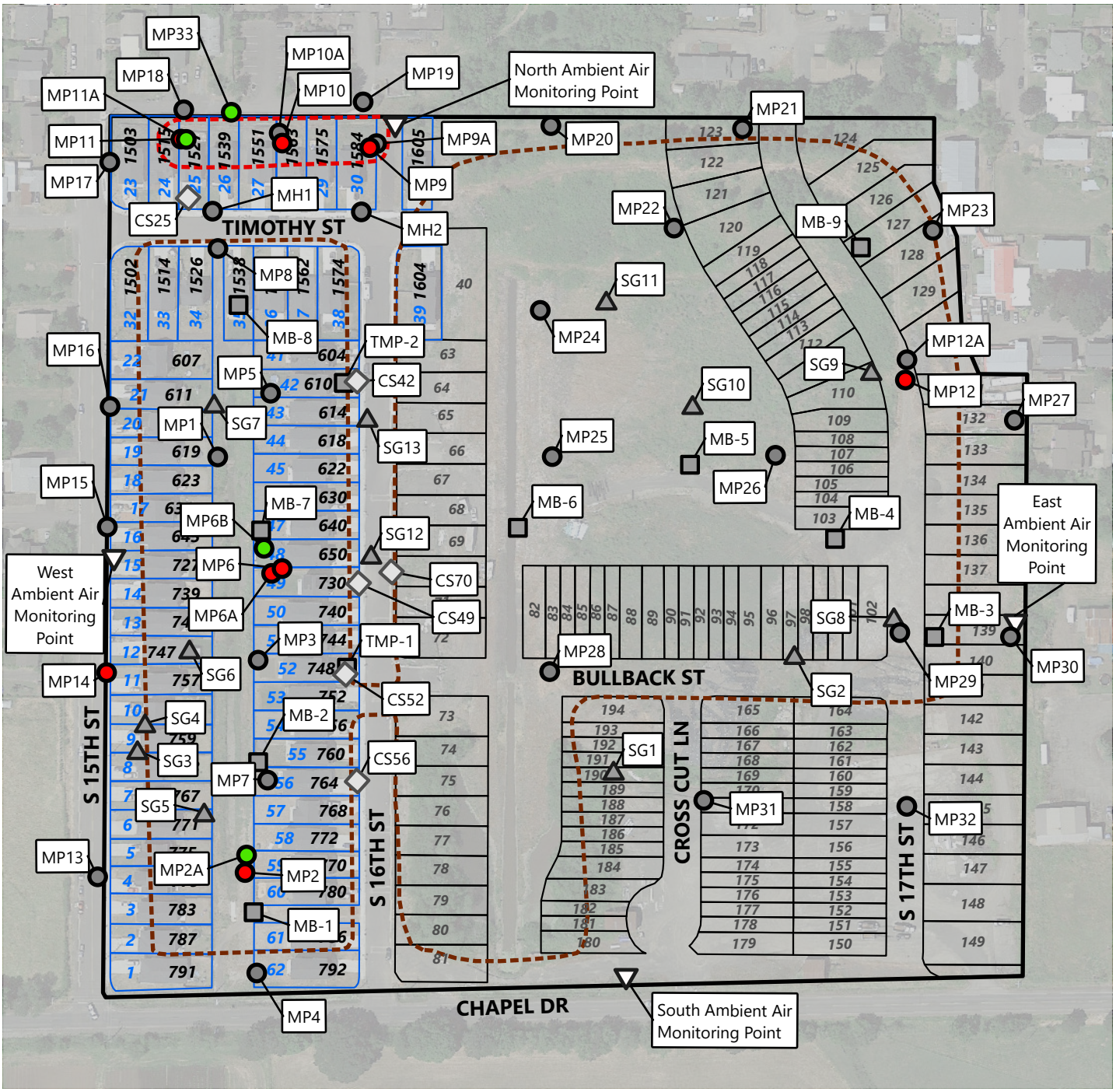
FIGURE
1



LEGEND

- Historical Log Pond
- Northwest Elevated Methane Area
- Boundary of Site
- Plat of Completed House with **Lot Number** and ***House Number***
- Plat of Future House with **Lot Number**

Monitoring Points
- Active
- Inactive/Missing
- Proposed Monitoring Point

Other Points
- Confined Space Points
- PBS Temporary Monitoring Points (2021)
- Ambient Air Monitoring Points
- Temporary Borings completed by Aerotech (June, 2020)

SOURCES: GOOGLE EARTH PRO; DATED JULY 2022
PROJECTION: NAD 2011 OREGON STATEWIDE LAMBERT INTL FT

N

Map Rotation: 3° West

SCALE: 1:2,400

0 100 200 400'

PREPARED FOR: MPC BUILDERS

Notes:
1. Plat lines are approximate.

PBS

SITE PLAN WITH MONITORING POINTS

1701 CHAPEL DRIVE, PHILOMATH, OREGON

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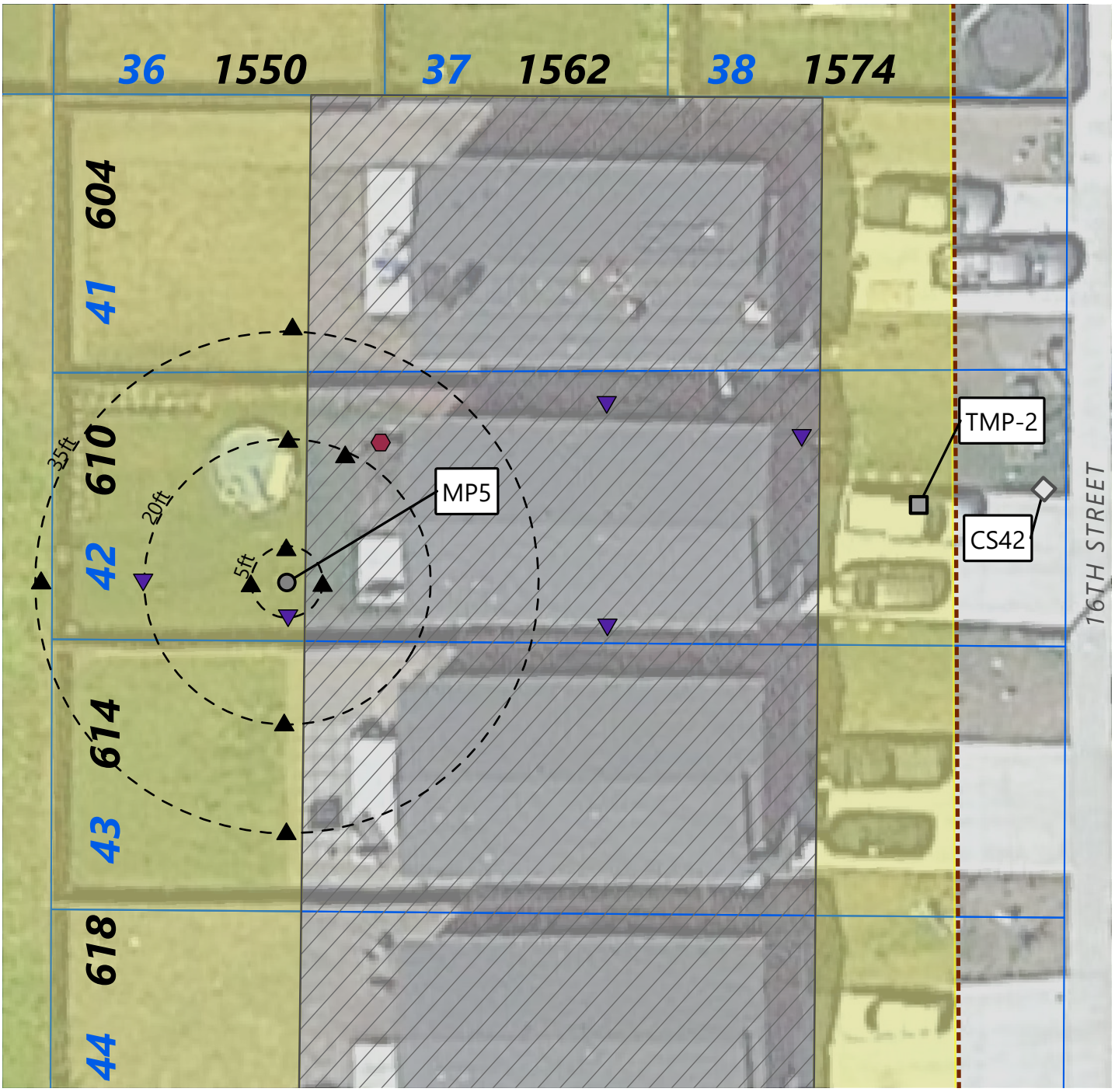
FIGURE
2



SOURCES: GOOGLE EARTH PRO; DATED JULY 2022
PROJECTION: NAD 2011 OREGON STATEWIDE LAMBERT INTL FT

Note:
1. Plat lines are approximate.

Legend

- Historical Log Pond
- Plat of Completed House with **Lot Number** and ***House Number***
- Structural Fill
- Approximate Organic Fill Left in Place

Monitoring Points

- Active Monitoring Point
- Temporary Borings completed by PBS (2021)
- Confined Spaces
- Proposed Temporary Soil Gas Monitoring Point
- Proposed Permanent Soil Gas Monitoring Point
- Permanent Soil Gas/Groundwater Monitoring Point

N

Map Rotation: 3° West

SCALE: 1:250

0 7.5 15 30'

PREPARED FOR: MPC BUILDERS

PBS

MP5 STUDY AREA

1701 CHAPEL DRIVE, PHILOMATH, OREGON

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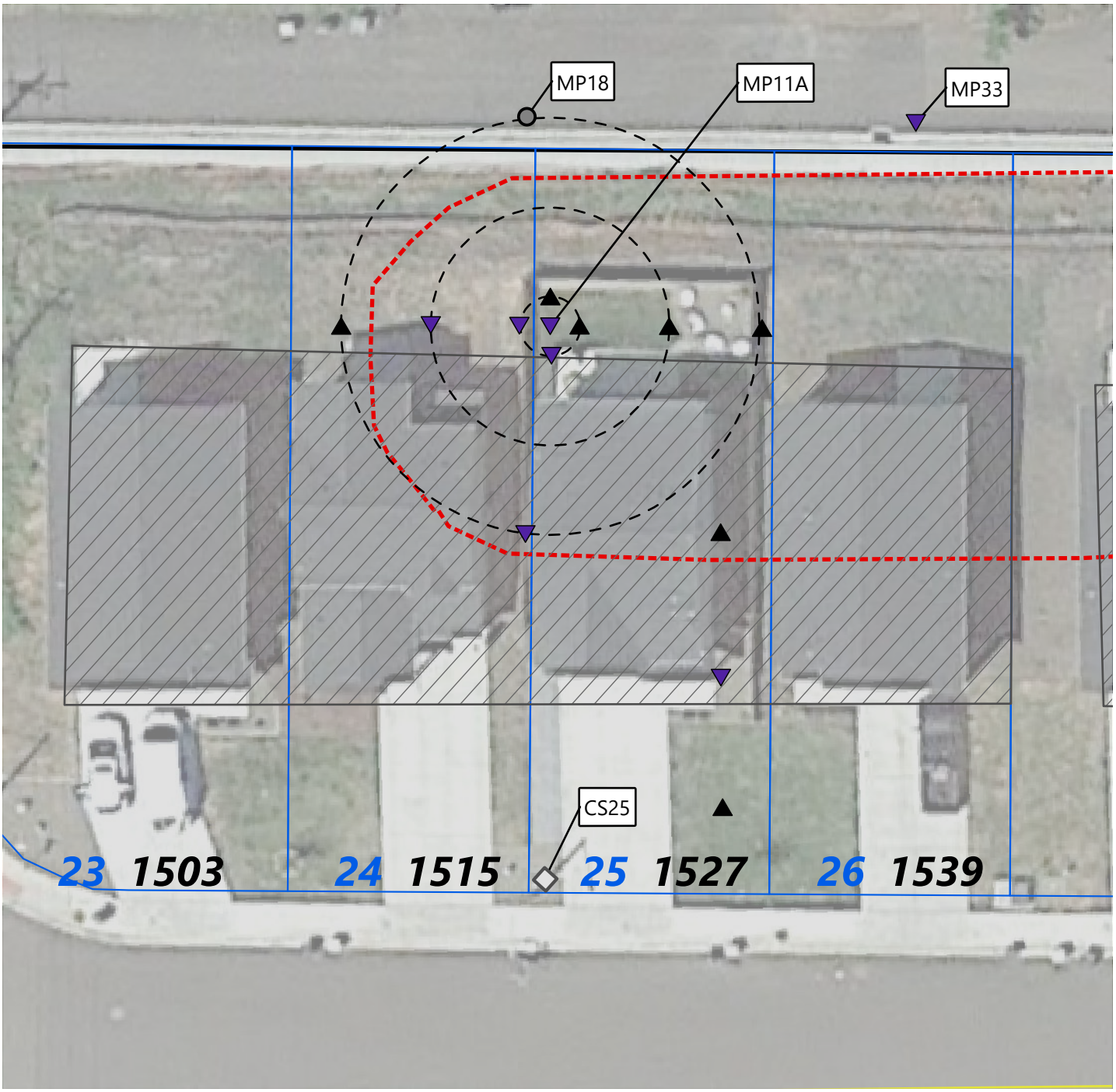
24159.000

FIGURE
3



SOURCES: GOOGLE EARTH PRO; DATED JULY 2022
PROJECTION: NAD 2011 OREGON STATEWIDE LAMBERT INTL FT

Note:
1. Plat lines are approximate.

Legend

- Northwest Elevated Methane Area
- Plat of Completed House with **Lot Number** and ***House Number***
- Structural Fill

Monitoring Points

- Active Monitoring Point
- Confined Spaces
- Proposed Temporary Soil Gas Monitoring Point
- Proposed Permanent Soil Gas Monitoring Point

N

Map Rotation: 3° West

SCALE: 1:300

0 7.5 15 30'

PREPARED FOR: MPC BUILDERS

PBS

MP11 STUDY AREA

1701 CHAPEL DRIVE, PHILOMATH, OREGON

JAN 2023
24159.000

FIGURE
4

Tables

Table 1. Temporary Soil Gas Monitoring Point Summary

Millpond Crossing

1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3, 4]							
Monitoring Point	Depth	Date	Time	Duration	Peak Methane	Methane	Carbon Dioxide	Oxygen	Balance Gas	H2S	Baro Pressure (Inches H2O)	Static Pressure (Inches H2O)
					pbv	pbv	pbv	pbv	pbv	ppm		
Aerotech June 2020												
SG1	10	6/1/2020	NA	NA	--	1.1	20.5	6	NA	0	NA	NA
SG2	6	6/1/2020	NA	NA	--	6.4	9.7	16	NA	0	NA	NA
SG3	2	6/1/2020	NA	NA	--	0.2	4.0	15.9	NA	0	NA	NA
SG3	4	6/1/2020	NA	NA	--	6.9	9.7	16	NA	0	NA	NA
SG4	2	6/1/2020	NA	NA	--	0.6	10.3	17.3	NA	0	NA	NA
SG4	4	6/1/2020	NA	NA	--	14.2	25.1	10.9	NA	0	NA	NA
SG5	4	6/1/2020	NA	NA	--	12.9	28.0	1.3	NA	0	NA	NA
SG6	4	6/1/2020	NA	NA	--	0.1	23.3	2.7	NA	0	NA	NA
SG7	4	6/1/2020	NA	NA	--	3.1	7.3	13	NA	0	NA	NA
SG8	4	6/1/2020	NA	NA	--	6.4	9.3	11.7	NA	0	NA	NA
SG9	5	6/1/2020	NA	NA	--	9.3	6.6	14.9	NA	0	NA	NA
SG10	5	6/1/2020	NA	NA	--	5.4	4.8	17.8	NA	0	NA	NA
SG11	5	6/1/2020	NA	NA	--	0.0	7.3	13.7	NA	0	NA	NA
SG12	5	6/1/2020	NA	NA	--	1.7	2.2	20	NA	0	NA	NA
SG13	5	6/1/2020	NA	NA	--	2.6	6.0	16.6	NA	0	NA	NA
PBS February 2021												
MB-1	8	2/17/2021	1333	120	78.6	0.0	1.3	20.1	NA	0	407.99	0.00
MB-2	2	2/17/2021	1337	120	36.6	35.6	26.4	10.1	NA	**152**	407.71	0.00
MB-3	1.5	2/18/2021	1339	120	58.5	58.0	40.8	0.8	NA	0	362.71	0.14
MB-4	1.3*	2/18/2021	1341	120	62.3	62.2	37.1	0.2	NA	**13**	402.55	0.41
MB-5	1	2/18/2021	1345	120	5.9	5.9	0.1	9.7	NA	0	375.36	-14.14
MB-6	2.5	2/18/2021	1347	120	59.5	59.3	40.6	0.1	NA	0	402.55	-27.19

Table 1. Temporary Soil Gas Monitoring Point Summary

Millpond Crossing

1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4]							
Monitoring Point	**Depth**	**Date**	**Time**	**Duration**	**Peak Methane**	**Methane**	**Carbon Dioxide**	**Oxygen**	**Balance Gas**	**H2S**	**Baro Pressure (Inches H2O)**	**Static Pressure (Inches H2O)**
					pbv	**pbv**	**pbv**	**pbv**	**pbv**	**ppm**		
MB-7	4	2/17/2021	1351	120	84.3	0.9	14.6	0.2	NA	0	407.44	0.00
MB-8	3	2/17/2021	1353	120	79.3	0.2	0.8	20.1	NA	0	407.71	0.00
PBS October 2021												
TMP-1	7	10/7/2021	1103	120	0.0	0.0	2.2	15.1	82.7	--	402.55	0.00
TMP-2	7	10/7/2021	1058	120	0.0	0.0	2.0	14.0	84.0	--	403.64	0.00
Oregon DEQ Site-Specific Action Levels						**1.25**	NS	NS	NA	**0.0467[a]**		

*Because of intense odors eminating from borehole, this reading was taken from the open borehole, rather than a PRT sampler

-- : not analyzed

11

NA: not applicable

NS: not set for this analyte

pbv: percent by volume

ppm: parts per million

[1]Methane accuracy is +/- 0.3 pbv for concentrations 0-5 pbv, +/- 0.5 pbv for concentrations 0-70 pbv, and 1.5 pbv for concentrations 70 to 100 pbv

[2]Carbon dioxide accuracy is +/- 0.3 pbv for concentrations 0-5 pbv, +/- 0.5 pbv for concentrations 0-60 pbv, and 1.5 pbv for concentrations 60 to 100 pbv

[3]Oxygen accuracy is +/- 1 pbv for concentrations between 0 to 25 pbv

[4]Barometric and static pressure accuracy is 0.01 inches water column (inches H2O)

[a]Action level proposed by DEQ on April 7, 2022

Table 2. Permanent Soil Gas Monitoring Point Summary

Millpond Crossing

1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4,5]								Jerome[6,7]	
Monitoring Point	**Screened Interval**	**Date**	**Time**	**Duration (sec)**	**Peak Methane**	**Methane**	**Carbon Dioxide**	**Oxygen**	**Balance Gas**	**H2S**	**Baro Pressure (Inches H2O)**	**Static Pressure (Inches H2O)**	**H2S**	**Notes**
					pbv	**pbv**	**pbv**	**pbv**	**pbv**	**ppm**			**ppm**	
MP1	4-5	4/14/2021	1204	268	0.9	0.4	3.6	7.6	--	--	404.72	0.00	--	
		4/23/2021	1305	200	1.7	**1.7**	13.2	0.3	87.9	--	403.91	0.00	--	
		4/28/2021	1449	121	2.1	**2.1**	12.8	1.4	83.6	--	407.99	0.00	--	
		5/6/2021	1325	120	2.3	**2.3**	16.3	0.3	81.2	--	404.18	0.00	--	
		5/12/2021	1242	120	2.3	**2.2**	15.8	0.2	81.8	--	406.49	0.00	--	
		5/19/2021	1138	120	2.1	**2.1**	17.1	0.7	80.1	--	405.00	0.00	--	
		5/26/2021	1135	120	2.6	**2.6**	18.0	0.4	79.0	--	405.00	0.00	--	
		10/7/2021	1520	120	1.4	**1.4**	18.5	1.0	79.1	--	404.04	-0.07	--	--[a]
		10/15/2021	1146	120	1.5	**1.5**	19.7	0.0	78.8	--	405.00	-0.06	--	--[a]
		10/22/2021	1225	120	1.7	**1.7**	19.8	0.0	79.0	--	399.96	-0.06	--	--[a]
		10/27/2021	1102	120	1.6	**1.6**	19.3	0.0	78.8	--	405.54	0.57	--	--[a]
		1/4/2022	1333	120	0.3	0.3	9.8	10.0	79.9	--	405.13	0.00	--	
		1/25/2022	1300	120	0.0	0.0	13.6	0.2	86.2	0	407.58	-0.04	--	
		2/7/2022	1115	120	0.0	0.0	14.2	0.2	85.4	0	410.84	-6.97	--	
		2/17/2022	1428	120	0.1	0.1	14.1	0.1	85.7	0	409.35	-5.45	--	
		10/6/2022	1345	420	0.7	0.7	19.8	0.0	79.5	**13**	404.59	-1.72	--	
		10/17/2022	1245	420	0.3	0.3	20.0	0.0	79.7	**14**	404.86	-2.07	--	
		11/7/2022	1136	420	0.1	0.1	19.6	0.4	79.9	**8**	398.20	-3.77	--	
		11/21/2022	1024	420	0.3	0.3	14.0	6.3	79.4	**8**	407.31	-2.37	--	
		12/5/2022	1358	420	0.7	0.6	16.2	9.4	73.9	**6**	404.04	-0.52	--	
		12/19/2022	1016	420	1.8	0.3	17.6	0.0	82.0	**5**	406.90	-0.72	--	
		1/10/2023	1031	420	0.8	0.2	16.2	0.3	83.4	**4**	396.02	-2.74	--	

Table 2. Permanent Soil Gas Monitoring Point Summary
Millpond Crossing
1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4,5]								Jerome[6,7]	
Monitoring Point	Screened Interval	Date	Time	Duration (sec)	Peak Methane	Methane	Carbon Dioxide	Oxygen	Balance Gas	H2S	Baro Pressure (Inches H2O)	Static Pressure (Inches H2O)	H2S	Notes
					pbv	pbv	pbv	pbv	pbv	ppm			ppm	
MP2	2.5-4	4/15/2021	1515	200	14.8	**14.8**	18.4	1.7	65	--	407.31	0.16	--	
		4/23/2021	1220	200	3.9	**3.9**	21.4	0.4	74.3	--	403.91	0.00	--	
		4/28/2021	1215	160	2.0	**1.6**	18.9	0.7	78.5	--	407.03	0.00	--	
		5/6/2021	1425	120	7.9	**7.7**	19.8	0.3	72	--	404.59	0.00	--	
		5/12/2021	1215	120	5.5	**5.4**	17.6	0.4	76.5	--	405.40	0.00	--	
		5/19/2021	1204	120	10.8	**10.7**	18.8	0.6	69.9	--	405.00	0.00	--	
		5/26/2021	1149	120	7.3	**7.1**	18.9	0.4	73.6	--	405.00	0.00	--	
		10/7/2021	1359	120	0.0	0.0	14.9	6.2	78.9	--	405.00	0.00	--	--[a]
		10/15/2021	1222	120	0.0	0.0	14.2	6.6	79.1	--	405.00	-0.06	--	--[a]
		10/22/2021	1152	120	0.0	0.0	13.9	6.4	79.7	--	399.96	-0.06	--	--[a]
		10/27/2021	1033	120	0.0	0.0	12.2	11.2	76.6	--	405.54	0.57	--	--[a]
		1/4/2022	1233	120	0.2	0.2	2.4	17.9	79.4	--	405.13	0.00	--	
		1/25/2022	1220	120	0.0	0.0	6.0	15.2	73.6	0	407.58	0.00	--	
		2/7/2022	1226	120	0.0	0.0	5.4	14.5	79.9	0	410.57	-1.72	--	
		2/17/2022	1506	120	0.0	0.0	1.0	19.3	79.6	0	409.35	-3.36	--	
		10/6/2022	**Missing**											
MP3	2.5-4	4/14/2021	1529	312	34.7	**33.8**	33.8	0.5	--	--	405.13	0.01	--	
		4/23/2021	--	--	--	--	--	--	--	--	--	--	--	Missing
		5/19/2021	1156	120	6.8	**6.5**	27.3	0.9	65.1	--	405.00	0.00	--	Located
		5/26/2021	1143	120	10.5	**10.3**	29.3	0.4	60.0	--	405.00	0.00	--	
		10/7/2021	1420	120	21.1	**19.4**	37.3	0.0	43.4	--	404.45	0.04	--	--[a]
		10/15/2021	1203	120	18.3	**18.3**	35.2	0.0	46.5	--	405.00	-0.06	--	--[a]
		10/22/2021	1215	120	25.0	**24.5**	37.4	0.0	37.9	--	399.96	-0.06	--	--[a]
		10/27/2021	1049	120	24.2	**23.9**	34.4	0.0	41.8	--	405.54	0.57	--	--[a]
		1/4/2022	1300	120	5.2	**5.2**	16.4	0.1	78.3	--	405.13	0.00	--	
		1/25/2022	1239	120	4.8	**4.8**	18.3	1.2	76.6	**2**	407.58	-0.01	--	
		2/7/2022	1158	120	2.8	**2.8**	18.3	0.0	79.0	**3**	410.57	-0.11	--	
		2/17/2022	1511	120	0.2	0.2	3.7	16.9	78.9	0	409.35	-3.64	--	
		10/6/2022	1510	420	9.1	**8.7**	28.5	0.0	62.8	**8**	404.72	-5.14	--	
		10/19/2022	1005	420	9.3	**8.5**	28.7	0.0	62.8	**7**	407.31	-0.22	--	
		11/7/2022	1218	420	7.2	**6.6**	25.4	0.0	67.9	**5**	398.61	-1.22	--	
		11/21/2022	1142	420	4.9	**4.0**	19.0	3.2	73.8	**6**	407.31	-1.20	--	
		12/5/2022	1342	420	3.3	**3.3**	19.7	0.2	76.8	**6**	404.04	-1.44	--	
		12/19/2022	1127	420	1.9	**1.8**	18.2	0.1	79.8	**7**	406.90	-2.08	--	
		1/10/2023	1140	420	4.1	**2.9**	18.1	10.0	65.0	**5**	396.02	-0.91	--	

Table 2. Permanent Soil Gas Monitoring Point Summary
Millpond Crossing
1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4,5]								Jerome[6,7]	
Monitoring Point	Screened Interval	Date	Time	Duration (sec)	Peak Methane	Methane	Carbon Dioxide	Oxygen	Balance Gas	H2S	Baro Pressure (Inches H2O)	Static Pressure (Inches H2O)	H2S	Notes
					pbv	pbv	pbv	pbv	pbv	ppm			ppm	
MP4	4-5	4/15/2021	1527	200	1.1	0.2	1.4	18.1	80.3	--	407.31	0.13	--	
		4/23/2021	1212	200	0.3	0.1	4.5	14.4	80.9	--	403.91	0.00	--	
		4/28/2021	1221	140	0.0	0.0	8.0	10.4	81.6	--	407.03	0.00	--	
		5/6/2021	1427	120	1.1	0.8	15.7	2.3	81	--	404.59	0.00	--	
		5/12/2021	1218	120	0.9	0.0	15.3	2.9	81.9	--	405.40	0.00	--	
		5/19/2021	1208	40	0.1	0.1	18.6	1.5	79.7	--	405.00	0.00	--	
		5/26/2021	1153	35	0.2	0.0	15.7	4.5	79.6	--	405.00	0.00	--	
		10/7/2021	1351	50	0.1	0.0	7.8	10.6	81.6	--	404.32	0.00	--	Flow Error
		10/15/2021	1225	120	0.0	0.0	3.9	14.3	81.8	--	405.00	-0.06	--	--[a]
		10/22/2021	1145	120	0.0	0.0	2.1	16.6	81.3	--	399.96	-0.06	--	--[a]
		10/27/2021	1025	120	0.0	0.0	1.5	17.8	80.7	--	405.54	0.57	--	--[a]
		1/4/2022	1220	45	0.2	0.2	9.6	9.9	79.8		405.13	0.00	--	Flow Error
		1/25/2022	1215	60	0.0	0.0	3.3	14.9	81.4	0	407.58	0.08	--	Flow Error
		2/7/2022	1214	30	0.0	0.0	9.9	7.4	81.6	0	410.57	-7.79	--	Flow Error
		2/17/2022	1500	120	0.0	0.0	10.7	5.4	84.4	0	409.35	-19.39	--	
		10/6/2022	1538	420	0.0	0.0	4.2	15.0	80.8	0	405.00	-3.63	0.000	

Table 2. Permanent Soil Gas Monitoring Point Summary
Millpond Crossing
1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4,5]								Jerome[6,7]	
Monitoring Point	**Screened Interval**	**Date**	**Time**	**Duration (sec)**	**Peak Methane**	**Methane**	**Carbon Dioxide**	**Oxygen**	**Balance Gas**	**H2S**	**Baro Pressure (Inches H2O)**	**Static Pressure (Inches H2O)**	**H2S**	**Notes**
					pbv	**pbv**	**pbv**	**pbv**	**pbv**	**ppm**			**ppm**	
MP5	4-5	4/14/2021	1617	400	45.2	**29.2**	14.6	5.2	--	--	405.00	0.00	--	
		4/23/2021	1250	200	45.6	**45.3**	24.0	0.4	30.3	--	403.91	0.00	--	
		4/28/2021	1300	130	45.3	**45.2**	24.7	0.4	29.6	--	407.99	0.00	--	
		5/6/2021	1309	120	23.5	**22.4**	14.5	9.9	52.8	--	404.18	0.00	--	
		5/12/2021	1144	120	33.8	**33.7**	22.2	4.1	39.9	--	405.40	0.00	--	
		5/19/2021	1148	120	33.9	**33.8**	25.2	2.9	37.9	--	405.00	0.00	--	
		5/26/2021	1138	120	36.8	**36.5**	29.0	0.9	33.6	--	405.00	0.00	--	
		10/7/2021	1315	120	43.0	**43.0**	42.4	0.5	14.2	--	404.32	-0.05	--	--[a]
		10/15/2021	1137	120	30.4	**30.4**	30.6	5.0	33.6	--	405.00	-0.06	--	--[a]
		10/22/2021	1440	120	46.6	**46.6**	37.8	0.0	15.6	--	399.96	-0.09	--	--[a]
		10/27/2021	1114	120	46.5	**42.5**	40.0	1.2	16.3	--	405.54	0.57	--	--[a]
		1/4/2022	--	--	--	--	--	--	--	--	--	--	--	No Access
		1/25/2022	1536	120	50.7	**50.7**	31.7	0.2	16.8	**12**	406.76	-0.10	--	
		2/7/2022	904	120	45.5	**45.5**	30.7	0.0	23.7	**12**	410.84	-0.01	--	
		2/17/2022	1528	120	23.8	**23.8**	21.8	2.1	51.1	0	409.35	-0.50	--	
		10/13/2022	1255	420	46.6	**46.6**	43.8	0.0	9.6	**14**	405.00	-0.44	--	
		10/19/2022	--	--	--	--	--	--	--	--	--	--	--	No Access
		11/7/2022	1500	420	44.4	**44.1**	43.6	0.5	9.5	**8**	399.01	-0.98	--	
		11/21/2022	1302	420	44.7	**40.2**	39.3	0.7	19.9	**6**	407.03	-2.10	--	
		12/5/2022	1330	420	39.9	**38.7**	39.3	0.2	21.8	**9**	404.04	-1.22	--	
		12/19/2022	1503	420	37.9	**36.4**	35.5	0.7	27.6	**5**	406.49	-1.79	--	
		1/10/2023	1512	420	34.2	**34.2**	37.7	0.0	27.9	**8**	395.89	-1.46	--	
MP6	7-9	4/14/2021	--	--	--	--	--	--	--	--	--	--	--	Water in Point
		4/23/2021	--	--	--	--	--	--	--	--	--	--	--	Water in Point
		4/28/2021	--	--	--	--	--	--	--	--	--	--	--	Water in Point
		5/6/2021	--	--	--	--	--	--	--	--	--	--	--	
MP6A	2-7	10/7/2021	1321	120	10.8	**8.9**	24.3	0.0	66.8	--	404.32	-0.05	--	--[a]
		10/15/2021	1152	120	8.1	**7.6**	26.6	0.4	65.4	--	405.00	-0.06	--	--[a]
		10/22/2021	1218	120	9.1	**7.8**	25.4	0.0	65.8	--	399.96	-0.06	--	--[a]
		10/27/2021	1057	120	8.0	**7.9**	25.4	0.0	66.9	--	405.54	0.57	--	--[a]
		1/4/2022	1317	120	0.8	0.8	15.5	0.2	83.5	--	405.13	0.00	--	
		1/25/2022	1250	120	0.9	0.9	15.3	0.3	83.5	**2**	407.58	-0.05	--	
		2/7/2022	1145	120	1.0	1.0	15.3	0.1	83.7	**1**	410.57	-0.01	--	
		2/17/2022	1517	120	0.1	0.1	1.2	18.4	80.2	0	409.35	-1.45	--	
		10/6/2022	**Missing**										--	

Table 2. Permanent Soil Gas Monitoring Point Summary
Millpond Crossing
1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4,5]								Jerome[6,7]	
Monitoring Point	**Screened Interval**	**Date**	**Time**	**Duration (sec)**	**Peak Methane**	**Methane**	**Carbon Dioxide**	**Oxygen**	**Balance Gas**	**H2S**	**Baro Pressure (Inches H2O)**	**Static Pressure (Inches H2O)**	**H2S**	**Notes**
					pbv	**pbv**	**pbv**	**pbv**	**pbv**	**ppm**			**ppm**	
MP7	5-6	4/14/2021	1445	200	0.6	0.4	15.4	3.7	80.3	--	407.31	0.16	--	
		4/23/2021	1227	200	0.0	0.0	21.4	0.05	78.1	--	403.91	0.00	--	
		4/28/2021	1210	122	0.4	0.1	22.9	0.5	76.6	--	407.03	0.04	--	
		5/6/2021	1421	120	0.2	0.1	23.5	1.3	75.1	--	404.59	0.00	--	
		5/12/2021	1208	120	0.3	0.2	23.3	0.4	76.1	--	405.40	0.00	--	
		5/19/2021	1200	120	0.7	0.3	24.6	0.7	74.4	--	405.00	0.00	--	
		5/26/2021	1147	120	0.4	0.3	24.5	0.4	74.9	--	405.00	0.00	--	
		10/7/2021	1345	120	4.1	**2.0**	23.4	0.3	73.8	--	404.32	0.00	--	--[a]
		10/15/2021	**Full of water; no reading**										--	
		10/22/2021	1200	30	0.0	0.0	0.2	18.7	81.2	--	399.96	-0.06	--	Water in Point
		10/27/2021	**Full of water; no reading**											Used p-pump
		1/4/2022	**Full of water; no reading**											
		1/25/2022	**Full of water; no reading**											
		2/7/2022	**Full of water; no reading**											
		2/17/2022	**Full of water; no reading**											
		10/6/2022	1404	420	1.4	0.5	22.5	0.0	77	**1**	404.59	-4.34	**1.2**	
		10/19/2022	1020	420	0.6	0.3	22.1	0.0	77.6	0	407.31	-1.42	0.000	
		11/7/2022	**Full of water; no reading**											
		11/21/2022	1130	420	0.0	0.0	0.3	21.5	78.2	0	407.31	-0.37	0.00	
		12/5/2022	**Full of water; no reading**											Flooded
		12/19/2022	**Full of water; no reading**											Flooded
		1/10/2023	**Full of water; no reading**											Flooded

Table 2. Permanent Soil Gas Monitoring Point Summary
Millpond Crossing
1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4,5]								Jerome[6,7]	
Monitoring Point	**Screened Interval**	**Date**	**Time**	**Duration (sec)**	**Peak Methane**	**Methane**	**Carbon Dioxide**	**Oxygen**	**Balance Gas**	**H2S**	**Baro Pressure (Inches H2O)**	**Static Pressure (Inches H2O)**	**H2S**	**Notes**
					pbv	**pbv**	**pbv**	**pbv**	**pbv**	**ppm**			**ppm**	
MP8	4-5	4/14/2021	1703	200	5.9	**5.7**	7.5	2.6	77.8	--	405.27	0.00	--	
		4/23/2021	1313	200	2.0	**2.0**	13.0	3.2	81.8	--	403.91	0.00	--	
		4/28/2021	1420	220	3.0	**2.7**	15.1	1.7	80.2	--	407.99	0.00	--	
		5/6/2021	1330	120	2.5	**1.8**	14.7	4.4	78.8	--	404.18	0.00	--	
		5/12/2021	1245	120	2.9	**2.3**	14.9	2.3	80.1	--	406.49	0.00	--	
		5/19/2021	1020	120	2.5	**2.2**	15.8	2.3	79.6	--	404.72	0.00	--	
		5/26/2021	1132	120	2.8	**2.8**	16.4	2.4	78.4	--	405.00	0.00	--	
		10/7/2021	1257	120	6.5	**6.5**	19.8	0.9	72.8	--	404.32	-0.05	--	--[a]
		10/15/2021	1303	120	10.8	**10.8**	21.6	0.1	67.4	--	405.67	-0.04	--	--[a]
		10/22/2021	1329	120	15.9	**15.9**	22.7	0.0	60.4	--	400.10	-0.07	--	--[a]
		10/27/2021	1309	120	11.2	**11.2**	21.1	0.0	67.6	--	406.08	0.10	--	--[a]
		1/4/2022	1400	120	2.1	**2.1**	10.2	0.1	79.3	--	405.00	0.00	--	
		1/25/2022	1110	120	3.3	**3.3**	13.9	2.5	80.2	0	408.12	-0.01	--	
		2/7/2022	1050	120	0.9	0.9	11.9	4.8	81.8	0	410.84	-1.03	--	
		2/17/2022	1420	120	0.0	0.0	1.7	19.1	79.0	0	409.35	-4.44	--	
		10/6/2022	1330	420	0.8	0.8	4.8	9.4	79.8	0	404.59	-3.14	0.000	
		10/17/2022	1310	420	0.0	0.0	8.8	10.9	80.2	0	404.86	-1.77	0.000	
		11/7/2022	1108	420	0.8	0.7	4.0	12.7	82.5	0	398.20	-2.01	0.000	
		11/21/2022	1010	420	1.4	**1.4**	12.9	5.9	79.5	0	407.31	-1.99	0.000	
		12/5/2022	1410	420	0.3	0.3	3.5	16.3	79.8	0	404.04	-1.11	0.000	
		12/19/2022	1009	420	0.4	0.4	5.5	14.4	79.6	0	406.90	-1.57	0.000	
		1/10/2023	1026	420	0.0	0.0	0.2	20.7	79.1	0	396.02	-3.07	0.000	
MP9	6-7	4/15/2021	1400	330	5.3	0.5	3.6	18.3	--	--	407.31	0.16	--	
		4/23/2021	1056	200	0.04	0.0	7.55	17.5	74.9	--	403.91	0.02	--	
		4/28/2021	1425	220	2.1	**2.0**	13.9	1.5	82.5	--	407.99	0.00	--	
		5/6/2021	1239	50	4.9	**4.9**	17.7	3.2	74.0	--	404.04	0.00	--	Flow Error
		5/12/2021	--	--	--	--	--	--	--	--	--	--	--	Flow Error
		5/19/2021	--	--	--	--	--	--	--	--	--	0.00	--	Flow Error
		5/26/2021	1122	120	0.2	0.0	0.4	19.3	80.2	--	405.00	0.00	--	
		10/7/2021	**point nonfunctional**										--	

Table 2. Permanent Soil Gas Monitoring Point Summary
Millpond Crossing
1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4,5]								Jerome[6,7]	
Monitoring Point	Screened Interval	Date	Time	Duration (sec)	Peak Methane	Methane	Carbon Dioxide	Oxygen	Balance Gas	H2S	Baro Pressure (Inches H2O)	Static Pressure (Inches H2O)	H2S	Notes
					pbv	pbv	pbv	pbv	pbv	ppm			ppm	
MP9A	2-7	10/7/2021	1430	120	0.1	0.0	8.8	11.0	80.1	--	404.45	0.04	--	--[a]
		10/15/2021	1329	120	2.0	**2.0**	25.7	0.0	72.3	--	405.67	-0.04	--	--[a]
		10/22/2021	1246	120	4.0	**3.9**	30.4	0.0	65.5	--	400.10	-0.07	--	--[a]
		10/27/2021	1300	120	5.1	**5.0**	31.9	0.0	63.2	--	406.08	0.10	--	--[a]
		1/4/2022	1455	120	0.9	0.9	13.6	0.1	80.9	--	405.00	0.00	--	
		1/25/2022	1144	120	1.4	**1.4**	12.5	9.7	76.0	0	408.12	-0.01	--	
		2/7/2022	1038	120	1.1	1.1	21.8	0.1	76.9	0	410.84	-4.87	--	
		2/17/2022	1330	120	0.5	0.5	11.7	9.8	77.9	0	409.62	-5.21	--	
		10/6/2022	1417	420	0.0	0.0	11.9	8.4	79.2	0	404.59	-4.60	0.000	
		10/19/2022	1040	420	0.0	0.0	8.2	13.0	78.7	0	407.31	-5.04	0.000	
		11/7/2022	1045	420	0.1	0.1	16.2	0.1	83.0	0	398.20	-2.02	0.000	
		11/21/2022	1052	420	0.1	0.0	5.3	15.4	79.2	0	407.31	-2.71	0.000	
		12/5/2022	1430	420	0.2	0.0	5.1	16.0	78.7	0	404.04	-1.06	0.000	
		12/19/2022	1111	420	1.1	1.1	15.5	0.2	83.4	0	406.90	-1.24	0.000	
		1/10/2023	1110	420	0.2	0.2	5.5	16.4	77.8	0	396.02	-1.39	0.000	
MP10	4-5	4/15/2021	1410	75	6.7	0.3	1.8	19.3	77.1	--	407.31	0.16	--	
		4/23/2021	--	--	--	--	--	--	--	--	--	--	--	Water in Point
		4/28/2021	1351	20	0.7	0.6	7.3	17.7	72.5	--	407.99	0	--	Water in Point
		5/6/2021	--	--	--	--	--	--	--	--	--	0	--	Water in Point
		5/12/2021	--	--	--	--	--	--	--	--	--	--	--	Water in Point
		5/19/2021	**Missing**										--	
MP10A	2-7	10/7/2021	1230	120	1.1	0.3	5.2	15.4	79.1	--	404.32	-0.05	--	--[a]
		10/15/2021	1318	120	17.2	0.2	0.5	18.1	81.2	--	405.67	-0.04	--	--[a]
		10/22/2021	1240	120	14.2	**7.3**	2.2	16.4	69.8	--	400.10	-0.06	--	--[a]
		10/27/2021	1125	120	30.1	**10.8**	15.2	13.8	61.3	--	405.54	0.57	--	--[a]
		1/4/2022	1510	120	3.7	0.9	14.5	2.3	78.8	--	405.00	0.00	--	
		1/25/2022	1032	120	3.1	**3.1**	2.9	21.6	72.8	0	408.26	0.64	--	
		2/7/2022	940	120	22.4	**22.4**	45.5	0.7	31.5	0	410.84	-3.17	--	
		2/17/2022	1245	120	20.8	**20.8**	37.5	3.9	41.7	0	409.62	-2.55	--	
		10/6/2022	1355	420	0.0	0.0	18.0	6.7	75.6	0	404.59	-3.66	0.000	
		10/19/2022	1100	420	0.0	0.0	11.2	12.6	76.2	0	407.31	-3.36	0.000	
		11/7/2022	1056	420	0.4	0.1	0.3	21.6	78	0	398.20	-3.48	0.000	
		11/21/2022	1038	420	0.1	0.1	0.3	21.3	78.2	0	407.31	-1.26	0.001	
		12/5/2022	1420	420	21.3	0.4	1.6	21.5	76.4	**6**	404.04	-2.30	--	Peak H2S at 28 ppm
		12/19/2022	1025	300	11.7	0.1	3.8	20.5	75.7	**12**	406.90	-2.07	--	Peak H2S at 32 ppm
		1/10/2023	1037	120	28.8	**2.0**	9.9	14.9	73.1	**14**	396.02	0.76	--	Water at 120 seconds

Table 2. Permanent Soil Gas Monitoring Point Summary
Millpond Crossing
1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4,5]								Jerome[6,7]	
Monitoring Point	**Screened Interval**	**Date**	**Time**	**Duration (sec)**	**Peak Methane**	**Methane**	**Carbon Dioxide**	**Oxygen**	**Balance Gas**	**H2S**	**Baro Pressure (Inches H2O)**	**Static Pressure (Inches H2O)**	**H2S**	**Notes**
					pbv	**pbv**	**pbv**	**pbv**	**pbv**	**ppm**			**ppm**	
MP11	5-6	4/15/2021	1420	220	28.0	**28.0**	36.8	1.6	33.4	--	407.31	0.16	--	
		4/23/2021	1328	200	22.1	**21.6**	44.0	0.9	33.3	--	403.91	0.00	--	
		4/28/2021	1408	200	25.5	**25.3**	46.4	0.3	28.1	--	407.99	0.00	--	
		5/6/2021	1255	120	30.1	**29.9**	52.4	0.3	17.4	--	404.04	0.00	--	
		5/12/2021	1250	120	30.5	**29.9**	52.4	0.3	16.8	--	406.49	0.00	--	
		5/19/2021	1115	120	30.7	**30.5**	54.5	0.6	14.2	--	404.72	0.00	--	
		5/26/2021	1125	120	31.2	**30.6**	56.0	0.8	12.5	--	405.00	0.00	--	
		10/7/2021	**Missing**										--	
MP12	7-9	4/15/2021	1600	370	12.7	0.7	1.6	18.1	79.6	--	407.31	0.16	--	
		4/23/2021	1405	200	0.0	0.0	7.4	15.3	77.4	--	403.91	0.00	--	
		4/28/2021	--	--	--	--	--	--	--	--	--	0.00	--	Water in Point
		5/6/2021	--	--	--	--	--	--	--	--	--	0.00	--	Water in Point
		5/12/2021	-	-	-	-	-	-	-	--	-	-	--	Water in Point
		5/19/2021	**point nonfunctional**										--	Water in Point
MP12A	2-7	10/7/2021	0933	120	0.4	0.2	9.5	9.6	80.8	--	403.64	-0.04	--	--[a]
		10/15/2021	915	120	14.1	**8.2**	23.6	4.3	64.0	--	405.00	--[a]	--	--[a]
		10/22/2021	950	120	18.4	**11.4**	20.2	8.8	77.3	--	399.83	-0.01	--	--[a]
		10/27/2021	915	120	1.2	0.3	0.5	14.2	80.3	--	405.95	0.00	--	--[a]
		1/4/2022	**Full of water; no reading**										--	Flooded
		1/25/2022	1510	120	34.4	**34.4**	12.5	0.3	52.6	**17**	406.76	1.70	--	
		2/7/2022	1430	120	37.8	**37.8**	13.2	0.1	48.8	**14**	410.43	7.98	--	
		2/18/2022	822	120	43.3	**43.3**	16.3	0.2	40.2	**11**	409.35	4.20	--	
		10/6/2022	911	60	57.9	**57.9**	40.4	0.5	1.3	**2**	404.45	-2.95	**2.9**	
MP13	2-7	10/7/2021	1144	120	0.0	0.0	1.2	17.5	81.3	--	404.32	-0.05	--	--[a]
		10/15/2021	1411	120	0.0	0.0	0.9	17.9	81.2	--	405.67	-0.04	--	--[a]
		10/22/2021	1350	120	0.0	0.0	0.9	16.6	81.0	--	399.96	-0.09	--	--[a]
		10/27/2021	1400	120	0.0	0.0	4.6	13.4	82.6	--	406.08	0.10	--	--[a]
		1/4/2022	1520	120	0.0	0.0	1.7	16.4	80.0	--	405.00	0.00	--	
		1/25/2022	920	120	0.0	0.0	0.0	22.6	77.0	0	408.80	-0.01	--	
		2/7/2022	828	120	0.0	0.0	0.2	21.3	78.5	0	410.84	-3.51	--	
		2/17/2022	1145	120	0.0	0.0	0.5	19.6	79.9	0	409.62	-7.77	--	
		10/6/2022	1205	420	0.0	0.0	3.5	18.0	78.5	0	404.59	-0.67	0.000	

Table 2. Permanent Soil Gas Monitoring Point Summary
Millpond Crossing
1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4,5]								Jerome[6,7]	
Monitoring Point	Screened Interval	Date	Time	Duration (sec)	Peak Methane	Methane	Carbon Dioxide	Oxygen	Balance Gas	H2S	Baro Pressure (Inches H2O)	Static Pressure (Inches H2O)	H2S	Notes
					pbv	pbv	pbv	pbv	pbv	ppm			ppm	
MP14	2-7	10/7/2021	1152	120	0.0	0.0	4.9	14.2	80.9	--	404.32	-0.05	--	--[a]
		10/15/2021	1405	120	0.0	0.0	4.8	13.4	81.8	--	405.67	-0.04	--	--[a]
		10/22/2021	1412	120	0.0	0.0	4.8	13.0	81.3	--	399.96	-0.09	--	--[a]
		10/27/2021	1345	120	0.0	0.0	7.4	10.5	82.2	--	406.08	0.10	--	--[a]
		1/4/2022	1530	120	0.0	0.0	2.8	15.2	81.2	--	405.00	0.00	--	
		1/25/2022	932	120	0.0	0.0	3.5	17.4	78.7	0	408.80	-0.02	--	
		2/7/2022	837	120	0.0	0.0	6.5	14.3	79.1	0	410.84	-3.36	--	
		2/17/2022	1155	120	0.0	0.0	0.6	19.7	79.6	0	409.62	-1.93	--	
		10/6/2022	**No Access - Covered by Astroturf**										--	
MP15	2-7	10/7/2021	1158	120	0.0	0.0	6.7	14.7	78.7	--	404.32	-0.05	--	--[a]
		10/15/2021	1402	120	0.0	0.0	1.9	17.2	80.9	--	405.67	-0.04	--	--[a]
		10/22/2021	1430	120	0.0	0.0	0.4	18.6	81.0	--	399.96	-0.09	--	--[a]
		10/27/2021	1335	120	0.0	0.0	2.6	17.4	80.3	--	406.08	0.10	--	--[a]
		1/4/2022	1537	120	0.0	0.0	2.0	15.0	81.1	--	405.00	0.00	--	
		1/25/2022	940	120	0.0	0.0	0.0	22.7	76.9	0	408.80	-0.02	--	
		2/7/2022	848	120	0.0	0.0	0.2	21.3	78.5	0	410.84	-1.35	--	
		2/17/2022	1205	120	0.0	0.0	0.4	19.9	79.7	0	409.62	-1.53	--	
		10/6/2022	1217	420	0.1	0.0	0.1	21.3	78.6	0	404.59	-1.35	0.000	
MP16	2-7	10/7/2021	1250	120	0.0	0.0	2.6	13.9	83.5	--	404.32	-0.05	--	--[a]
		10/15/2021	1355	120	0.0	0.0	2.8	12.8	84.4	--	405.67	-0.04	--	--[a]
		10/22/2021	1436	120	0.0	0.0	4.4	11.9	83.7	--	399.96	-0.09	--	--[a]
		10/27/2021	1325	120	0.0	0.0	4.4	14.0	81.7	--	406.08	0.10	--	--[a]
		1/4/2022	1550	120	0.0	0.0	2.0	13.0	79.9	--	405.00	0.00	--	
		1/25/2022	946	120	0.0	0.0	1.0	19.2	79.5	0	408.80	-0.02	--	
		2/7/2022	855	120	0.0	0.0	1.3	17.9	80.8	0	410.84	-3.03	--	
		2/17/2022	1211	120	0.0	0.0	1.1	19.2	79.7	0	409.62	-2.80	--	
		10/6/2022	1229	420	0.0	0.0	2.5	17.9	79.5	0	404.59	-3.19	0.000	
MP17	2-7	10/7/2021	1240	120	0.0	0.0	3.1	15.9	81.0	--	404.32	-0.05	--	--[a]
		10/15/2021	1349	120	0.0	0.0	3.0	15.6	81.4	--	405.67	-0.04	--	--[a]
		10/22/2021	1306	120	0.0	0.0	3.1	15.3	81.6	--	400.10	-0.07	--	--[a]
		10/27/2021	1315	120	0.0	0.0	3.0	15.5	81.5	--	406.08	0.10	--	--[a]
		1/4/2022	1431	120	0.0	0.0	2.2	15.1	80.2	--	405.00	0.00	--	
		1/25/2022	951	120	0.0	0.0	3.1	19.0	77.7	0	408.80	-0.02	--	
		2/7/2022	916	120	0.1	0.1	3.1	18.5	78.3	0	410.84	-2.04	--	
		2/17/2022	1220	120	0.0	0.0	1.2	19.3	79.5	0	409.62	-1.08	--	
		10/6/2022	1238	420	0.0	0.0	2.1	19.7	78.2	0	404.59	-0.66	0.000	

Table 2. Permanent Soil Gas Monitoring Point Summary
Millpond Crossing
1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4,5]								Jerome[6,7]	
Monitoring Point	Screened Interval	Date	Time	Duration (sec)	Peak Methane	Methane	Carbon Dioxide	Oxygen	Balance Gas	H2S	Baro Pressure (Inches H2O)	Static Pressure (Inches H2O)	H2S	Notes
					pbv	pbv	pbv	pbv	pbv	ppm			ppm	
MP18	2-7	10/7/2021	1223	120	0.0	0.0	3.0	13.0	84.0	--	404.32	-0.05	--	--[a]
		10/15/2021	1342	120	0.0	0.0	0.0	18.7	81.5	--	405.67	-0.04	--	--[a]
		10/22/2021	1259	120	0.0	0.0	0.0	18.9	81.6	--	399.96	-0.07	--	--[a]
		10/27/2021	1241	120	0.0	0.0	5.3	15.1	79.5	--	406.08	0.10	--	--[a]
		1/4/2022	1440	120	0.0	0.0	0.1	19.8	80.9	--	405.00	0.00	--	
		1/25/2022	1021	120	0.0	0.0	0.1	22.6	76.8	0	408.26	-0.24	--	
		2/7/2022	947	120	0.1	0.1	6.5	14.8	78.7	0	410.84	4.34	--	
		2/17/2022	1305	120	0.0	0.0	7.0	13.1	80.2	0	409.62	1.75	--	
		10/6/2022	1301	420	0.0	0.0	4.6	16.2	79.2	0	404.59	-3.24	0.000	
MP19	2-7	10/7/2021	1435	120	0.0	0.0	5.9	14.5	79.6	--	404.45	-0.04	--	--[a]
		10/15/2021	1334	120	0.0	0.0	6.8	11.5	81.8	--	405.67	-0.04	--	--[a]
		10/22/2021	1256	120	0.0	0.0	2.5	16.3	81.3	--	399.96	-0.07	--	--[a]
		10/27/2021	1236	120	0.6	0.3	12.3	5.8	80.6	--	406.08	0.10	--	--[a]
		1/4/2022	1446	120	0.0	0.0	0.7	18.7	80.5	--	405.00	0.00	--	
		1/25/2022	1039	120	0.0	0.0	0.0	22.6	77.1	0	408.26	-0.27	--	
		2/7/2022	930	120	0.2	0.2	1.9	18.0	78.3	0	410.84	-0.48	--	
		2/17/2022	1227	120	0.0	0.0	12.2	6.5	81	0	409.62	-1.46	--	
		10/6/2022	1250	420	0.0	0.0	2.8	18.8	78.5	0	404.59	-1.85	0.000	
MP20	2-7	10/7/2021	1050	120	0.0	0.0	2.2	17.3	80.5	--	403.64	-0.04	--	--[a]
		10/15/2021	953	120	0.0	0.0	4.0	16.2	79.8	--	405.00	--[a]	--	--[a]
		10/22/2021	1021	120	0.0	0.0	3.9	13.9	78.8	--	399.83	-0.06	--	--[a]
		10/27/2021	942	120	0.0	0.0	3.9	13.8	79.0	--	405.95	0.19	--	--[a]
		1/4/2022	**Full of water; no reading**										--	Flooded
		1/25/2022	**Full of water; no reading**										--	Flooded
		2/7/2022	**Full of water; no reading**								410.43	6.30	--	Flooded
		2/18/2022	**Full of water; no reading**								409.35	-4.30	--	Flooded
		10/6/2022	1015	420	0.0	0.0	5.7	16.7	77.6	0	404.59	-2.48	0.000	
		11/7/2022	1000	30	0.0	0.0	0.2	21.2	78.7	0	398.20	-1.88	--	Water in Point
		11/21/2022	917	45	0.0	0.0	0.2	22.1	77.7	0	407.85	-1.44	--	Water in Point
		12/5/2022	**Full of water; no reading**										--	Flooded
		12/19/2022	**Full of water; no reading**										--	Flooded
		1/10/2023	**Full of water; no reading**										--	Flooded

Table 2. Permanent Soil Gas Monitoring Point Summary
Millpond Crossing
1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4,5]								Jerome[6,7]	
Monitoring Point	**Screened Interval**	**Date**	**Time**	**Duration (sec)**	**Peak Methane**	**Methane**	**Carbon Dioxide**	**Oxygen**	**Balance Gas**	**H2S**	**Baro Pressure (Inches H2O)**	**Static Pressure (Inches H2O)**	**H2S**	**Notes**
					pbv	**pbv**	**pbv**	**pbv**	**pbv**	**ppm**			**ppm**	
MP21	2-7	10/7/2021	1042	120	0.0	0.0	8.7	12.4	78.9	--	403.64	-0.04	--	--[a]
		10/15/2021	946	120	0.0	0.0	90.7	11.7	78.6	--	405.00	--[a]	--	--[a]
		10/22/2021	1010	120	0.0	0.0	10.4	10.4	79.2	--	399.83	-0.06	--	--[a]
		10/27/2021	933	120	0.0	0.0	10.0	11.2	78.9	--	405.95	0.19	--	--[a]
		1/4/2022	**Full of water; no reading**										--	Flooded
		1/25/2022	**Full of water; no reading**										--	Flooded
		2/7/2022	**Full of water; no reading**										--	Flooded
		2/18/2022	**Under Water**										--	Flooded
		10/6/2022	947	420	0.0	0.0	10.3	13.1	76.6	0	404.59	-3.36	0.000	
		11/7/2022	**Under Water**										--	Flooded
		11/21/2022	859	20	0.0	0.0	0.1	22.1	77.8	0	407.85	-0.92	--	Water in Point
		12/5/2022	**Full of water; no reading**										--	Flooded
		12/19/2022	**Full of water; no reading**										--	Flooded
		1/10/2023	**Full of water; no reading**										--	Flooded
MP22	2-7	10/7/2021	1010	120	36.5	**36.5**	40.8	0.2	22.7	--	403.64	-0.04	--	--[a]
		10/15/2021	1020	120	39.9	**39.6**	42.3	0.0	18.2	--	405.00	--[a]	--	--[a]
		10/22/2021	1016	120	38.3	**38.3**	41.9	0.0	19.1	--	399.83	-0.06	--	--[a]
		10/27/2021	937	120	37.6	**37.6**	42.0	0.0	19.9	--	405.95	0.19	--	--[a]
		1/4/2022	1030	120	38.9	**38.9**	37.6	0.0	31.0	--	405.13	0.00	--	
		1/25/2022	1529	120	61.7	**61.7**	38.1	0.1	0.0	**6**	406.76	-0.01	--	
		2/7/2022	1320	120	61.2	**61.2**	38.8	0.0	0.0	**4**	410.43	-2.33	--	
		2/18/2022	750	120	47.9	**47.4**	32.6	3.7	15.4	0	409.35	-3.57	--	
		10/6/2022	1005	420	16.4	**14.5**	26.5	6.0	52.9	**1**	404.59	-2.53	**0.64**	
		11/7/2022	942	420	36.4	**36.4**	39.9	0	25.6	**4**	398.20	-2.41	--	
		11/21/2022	850	420	39.5	**39.5**	30.6	1.6	28.3	**6**	407.85	-2.12	--	
		12/5/2022	1558	420	39.0	**35.4**	28.2	1.9	34.3	**7**	404.18	-1.94	--	
		12/19/2022	919	420	39.9	**37.6**	27.7	0.9	33.5	**6**	407.03	-2.57	--	
		1/10/2023	918	420	36.8	**34.4**	26.8	2.2	36.6	**6**	396.29	-1.56	--	

Table 2. Permanent Soil Gas Monitoring Point Summary
Millpond Crossing
1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4,5]								Jerome[6,7]	
Monitoring Point	**Screened Interval**	**Date**	**Time**	**Duration (sec)**	**Peak Methane**	**Methane**	**Carbon Dioxide**	**Oxygen**	**Balance Gas**	**H2S**	**Baro Pressure (Inches H2O)**	**Static Pressure (Inches H2O)**	**H2S**	**Notes**
					pbv	**pbv**	**pbv**	**pbv**	**pbv**	**ppm**			**ppm**	
MP23	2-7	10/7/2021	1022	120	16.6	**16.6**	11.3	0.0	72.0	--	403.64	-0.04	--	--[a]
		10/15/2021	935	30	11.2	**10.6**	9.5	9.1	70.9	--	405.00	--[a]	--	--[a]
		10/22/2021	**Full of water; no reading**											
		10/27/2021	**Full of water; no reading**											
		1/4/2022	**Full of water; no reading**											
		1/25/2022	1515	5	4.2	**4.2**	2.0	20.6	73.2	0	406.76	2.71	--	Water after 5 secs
		2/7/2022	**Full of water; no reading**								410.43	-1.16	--	Flooded
		2/18/2022	**Full of water; no reading**										--	Flooded
		10/6/2022	940	420	0.2	0.0	4.3	16.4	79.3	0	404.45	-3.10	0.000	
		11/7/2022	**Full of water; no reading**										--	Flooded
		11/21/2022	**Full of water; no reading**											Flooded
		12/5/2022	**Full of water; no reading**										--	Flooded
		12/19/2022	**Full of water; no reading**										--	Flooded
		1/10/2023	**Full of water; no reading**										--	Flooded
MP24	2-7	10/7/2021	1000	120	33.3	**30.5**	36.2	1.2	32.3	--	403.64	-0.04	--	--[a]
		10/15/2021	959	120	27.0	**26.3**	36.4	0.3	37.0	--	405.00	--[a]	--	--[a]
		10/22/2021	1025	120	36.8	**34.4**	40.2	0.0	26.4	--	399.83	-0.06	--	--[a]
		10/27/2021	950	120	37.0	**36.1**	41.1	0.0	24.2	--	405.95	0.19	--	--[a]
		1/4/2022	1059	120	21.4	**21.1**	30.1	0.0	65.2	--	405.13	0.00	--	
		1/25/2022	1502	120	51.9	**51.9**	41.6	0.2	6.1	**10**	406.76	-0.04	--	
		2/7/2022	1335	120	49.7	**49.7**	42.3	0.0	7.9	**10**	410.43	-3.54	--	
		2/18/2022	757	120	54.3	**54.3**	41.4	0.5	3.8	**11**	409.35	-3.90	--	
		10/6/2022	1035	420	52.7	**32.7**	37.6	0.6	30.5	**4**	404.86	-3.71	--	
MP25	2-7	10/7/2021	0952	120	42.6	**42.3**	47.5	0.0	10.3	--	403.64	-0.04	--	--[a]
		10/15/2021	1005	120	42.9	**42.9**	48.0	0.0	9.0	--	405.00	--[a]	--	--[a]
		10/22/2021	1034	120	43.4	**43.4**	47.9	0.0	11.4	--	399.83	-0.06	--	--[a]
		10/27/2021	954	120	42.4	**42.4**	46.2	0.0	12.2	--	405.95	0.19	--	--[a]
		1/4/2022	1135	120	37.2	**36.4**	44.2	0.0	37.2	--	405.13	0.00	--	
		1/25/2022	1450	120	30.3	**30.3**	31.0	0.2	38.5	0	406.76	-0.04	--	
		2/7/2022	1350	120	39.6	**39.6**	32.7	0.0	27.5	**1**	410.43	-2.35	--	
		2/18/2022	806	120	50.0	**50.0**	32.1	0.2	18.7	0	409.35	-2.97	--	
		10/6/2022	1042	420	24.6	**24.6**	39.1	0.1	35.6	**1**	404.86	-2.01	**1.7**	

Table 2. Permanent Soil Gas Monitoring Point Summary
Millpond Crossing
1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4,5]								Jerome[6,7]	
Monitoring Point	**Screened Interval**	**Date**	**Time**	**Duration (sec)**	**Peak Methane**	**Methane**	**Carbon Dioxide**	**Oxygen**	**Balance Gas**	**H2S**	**Baro Pressure (Inches H2O)**	**Static Pressure (Inches H2O)**	**H2S**	**Notes**
					pbv	**pbv**	**pbv**	**pbv**	**pbv**	**ppm**			**ppm**	
MP26	2-7	10/7/2021	0943	120	10.6	**10.6**	28.6	1.3	59.4	--	403.64	-0.04	--	--[a]
		10/15/2021	1011	120	8.0	**8.0**	27.4	0.0	64.5	--	405.00	--[a]	--	--[a]
		10/22/2021	1042	120	6.7	**6.7**	24.2	0.0	60.1	--	399.83	-0.06	--	--[a]
		10/27/2021	858	120	2.0	**2.0**	17.3	0.3	80.4	--	405.95	0.0	--	--[a]
		1/4/2022	**Full of water; no reading**											
		1/25/2022	1441	120	50.4	**50.4**	25.6	0.1	23.5	0	406.76	-0.03	--	
		2/7/2022	1456	120	49.1	**49.1**	22.6	0.1	28.2	0	410.43	-0.95	--	
		2/18/2022	833	120	60.7	**60.7**	27.4	0.1	12	0	409.35	-3.90	--	
		10/6/2022	904	45	2.1	**1.7**	20.6	2.9	74.1	0	404.45	-3.26	0.000	
MP27	2-7	10/7/2021	0926	120	0.0	0.0	4.9	14.3	80.8	--	403.64	-0.04	--	--[a]
		10/15/2021	922	120	0.0	0.0	6.3	13.8	80.0	--	405.00	--[a]	--	--[a]
		10/22/2021	932	40	0.0	0.0	2.2	15.4	80.1	--	399.83	-0.01	--	Water in Point
		10/27/2021	905	30	0.0	0.0	4.1	18.2	77.6	--	405.95	0.0	--	Water/used p-pump
		1/4/2022	**Full of water; no reading**											
		1/25/2022	1432	15	2.6	**2.6**	5.7	12.9	78.2	0	406.76	-5.39	--	Water after 15 secs
		2/7/2022	1442	20	1.6	**1.6**	9.6	15.1	73.3	0	410.43	-5.49	--	Water after 20 secs
		2/18/2022	842	15	0.8	0.8	6.9	19.1	73.2	0	409.35	-7.31	--	Water after 15 secs
		10/6/2022	857	65	0.5	0.0	0.1	15.8	78.0	0	404.45	-2.69	0.000	
		10/17/2022	1110	420	0.6	0.5	4.6	18.1	76.8	0	404.59	-0.96	0.000	
		11/7/2022	915	60	0.2	0.2	12.7	12.3	74.8	0	398.20	15.06	--	Water after 60 secs
		11/21/2022	824	420	0.0	0.0	0.1	22.2	77.7	0	407.85	-0.51	0.000	
		12/5/2022	855	420	0.0	0.0	0.1	20.9	79.1	0	404.04	-0.97	0.000	
		12/19/2022	852	420	0.0	0.0	0.1	20.5	79.5	0	407.03	-0.88	0.000	
		1/10/2023	850	420	0.0	0.0	0.1	20.4	79.5	0	396.29	-0.91	0.000	
MP28	2-7	10/7/2021	0851	120	16.5	**16.5**	47.3	0.6	35.8	--	404.04	0.07	--	--[a]
		10/15/2021	853	120	24.4	**20.7**	36.9	6.5	36.0	--	405.00	--[a]	--	--[a]
		10/22/2021	908	120	32.1	**28.4**	45.1	3.2	23.9	--	399.83	-0.01	--	--[a]
		10/27/2021	833	120	36.4	**35.6**	53.9	1.4	9.2	--	405.95	0.19	--	--[a]
		1/4/2022	918	120	18.6	**18.4**	31.4	6.0	76.4	--	405.13	0	--	
		1/25/2022	1400	120	53.7	**53.1**	44.6	0.9	23.3	0	406.76	1.36	--	
		2/7/2022	1518	120	51.9	**49.8**	43.8	1.0	5.7	0	410.43	-2.49	--	
		2/18/2022	936	120	49.2	**49.2**	42.9	1.1	7.8	0	409.35	-2.77	--	
		10/6/2022	834	120	33.6	**33.3**	55.0	0.1	11.3	**1**	404.45	-3.32	**0.051**	

Table 2. Permanent Soil Gas Monitoring Point Summary
Millpond Crossing
1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4,5]								Jerome[6,7]	
Monitoring Point	**Screened Interval**	**Date**	**Time**	**Duration (sec)**	**Peak Methane**	**Methane**	**Carbon Dioxide**	**Oxygen**	**Balance Gas**	**H2S**	**Baro Pressure (Inches H2O)**	**Static Pressure (Inches H2O)**	**H2S**	**Notes**
					pbv	**pbv**	**pbv**	**pbv**	**pbv**	**ppm**			**ppm**	
MP29	2-7	10/7/2021	0913	120	35.3	**35.3**	28.4	0.0	36.1	--	403.64	-0.04	--	--[a]
		10/15/2021	908	120	33.1	**33.1**	25.5	0.0	40.9	--	405.00	--[a]	--	--[a]
		10/22/2021	924	120	35.1	**35.1**	25.5	0.0	38.8	--	399.83	-0.01	--	--[a]
		10/27/2021	852	120	42.9	0.0	28.6	0.1	27.7	--	405.95	0.19	--	--[a]
		1/4/2022	**Full of water; no reading**											
		1/25/2022	1411	120	58.0	**58.0**	16.5	1.3	23.3	0	406.76	-0.01	--	
		2/7/2022	1503	120	55.3	**55.3**	16.7	0.1	27.8	0	410.43	-0.97	--	
		2/18/2022	927	120	55.9	**55.9**	17.5	0.2	26.5	0	409.35	-2.44	--	
		10/6/2022	840	205	31.7	**31.7**	35.3	0.0	29.5	**8**	404.45	-3.38	--	
MP30	2-7	10/7/2021	0919	120	0.0	0.0	3.8	15.7	80.5	--	403.64	-0.04	--	--[a]
		10/15/2021	903	120	0.0	0.0	3.4	16.5	80.1	--	405.00	--[a]	--	--[a]
		10/22/2021	920	120	0.0	0.0	3.6	15.4	80.9	--	399.69	0.0	--	--[a]
		10/27/2021	840	20	0.0	0.0	0.2	20.2	79.4	--	405.95	0.0	--	Water/used p-pump
		1/4/2022	940	120	0.0	0.0	3.9	15.2	81.8	--	405.13	0.0	--	
		1/25/2022	1420	45	0.1	0.1	5.4	13.4	80.8	0	406.76	-0.02	--	Water after 45 secs
		2/7/2022	1532	30	0.1	0.1	5.4	17.2	77.3	0	410.43	-1.90	--	Water after 30 secs
		2/18/2022	918	30	0.1	0.1	2.3	20.3	77.3	0	409.35	-4.62	--	Water after 30 secs
		10/6/2022	850	90	0.3	0.0	3.7	17.8	78.5	0	404.45	-1.26	0.000	
		10/17/2022	1120	420	0.5	0.5	3.3	18.8	77.5	0	404.59	-4.25	0.000	
		11/7/2022	900	60	0.9	0.9	3.9	16.4	78.8	0	398.20	0.00	0.002	Valve open/water after 60 secs
		11/21/2022	811	420	0.0	0.0	0.2	22.1	77.7	0	407.85	-0.91	0.000	
		12/5/2022	843	420	0.0	0.0	0.2	21.1	78.7	0	404.04	-1.23	0.000	
		12/19/2022	830	420	0.0	0.0	0.2	21.1	78.8	0	407.03	-1.41	0.000	
		1/10/2023	840	30	0.0	0.0	0.1	20.2	79.8	0	396.29	-0.56	--	Water after 30 secs
MP31	2-7	10/7/2021	0840	120	0.0	0.0	5.0	10.7	84.3	--	404.04	0.07	--	--[a]
		10/15/2021	842	60	0.0	0.0	7.0	2.6	90.2	--	405.00	--[a]	--	--[a]
		10/22/2021	850	60	0.0	0.0	7.9	3.2	88.4	--	399.69	0.0	--	Water in Point
		10/27/2021	820	40	0.0	0.0	5.5	13.4	82.4	--	405.95	0.19	--	Water/used p-pump
		1/4/2022	**Full of water; no reading**											
		1/25/2022	**Full of water; no reading**											
		2/7/2022	**Full of water; no reading**											
		2/18/2022	**Under Water**											
		10/6/2022	1550	420	0.0	0.0	11.4	4.6	84.0	0	405.00	-2.86	0.000	

Table 2. Permanent Soil Gas Monitoring Point Summary
Millpond Crossing
1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4,5]								Jerome[6,7]	
Monitoring Point	**Screened Interval**	**Date**	**Time**	**Duration (sec)**	**Peak Methane**	**Methane**	**Carbon Dioxide**	**Oxygen**	**Balance Gas**	**H2S**	**Baro Pressure (Inches H2O)**	**Static Pressure (Inches H2O)**	**H2S**	**Notes**
					pbv	**pbv**	**pbv**	**pbv**	**pbv**	**ppm**			**ppm**	
MP32	2-7	10/7/2021	0830	120	0.1	0.0	0.6	18.8	80.6	--	404.04	0.07	--	--[a]
		10/15/2021	835	60	0.0	0.0	1.2	17.4	81.4	--	405.00	--[a]	--	--[a]
		10/22/2021	835	80	0.1	0.1	7.4	4.8	86.8	--	399.69	0.0	--	Flow Error
		10/27/2021	800	60	0.0	0.0	5.0	12.3	82.7	--	405.40	0.12	--	Flow Error
		1/4/2022	852	120	6.1	**6.1**	10.3	1.2	82.4	--	405.13	0.00	--	
		1/25/2022	1555	120	1.4	**1.4**	4.7	18.2	76.6	0	406.76	-0.08	--	
		2/7/2022	1550	30	0.0	0.0	0.5	20.9	78.5	0	410.43	-0.02	--	
		2/18/2022	1000	30	0.0	0.0	0.3	20.8	78.7	0	409.35	-1.01	--	Water after 30 secs
		10/6/2022	805	15	0.7	0.0	0.1	21.3	78.6	0	405.40	0.00	0.000	Valve opened early
		10/17/2022	1129	420	0.8	0.4	0.7	21.6	77.3	0	404.59	-0.02	0.000	
		11/7/2022	850	420	0.2	0.1	0.2	21.8	77.9	0	398.20	0.20	0.000	Valve open
		11/21/2022	800	420	0.1	0.0	0.1	22.0	77.8	0	407.85	-1.42	0.000	
		12/5/2022	830	420	0.0	0.0	0.1	21.2	78.6	0	404.04	-1.03	0.000	
		12/19/2022	802	420	0.0	0.0	0.2	20.7	79.1	0	407.03	-1.22	0.000	
		1/10/2023	810	60	4.8	**2.1**	2.9	15.9	79.2	0	396.29	2.31	0.000	Pump fail after 60 seconds
MH1	2-7	10/7/2021	1207	120	2.0	**2.0**	10.9	0.0	87.1	--	404.32	-0.05	--	--[a]
		10/15/2021	1310	120	1.5	**1.5**	10.0	0.0	88.5	--	405.67	-0.04	--	--[a]
		10/22/2021	1312	120	1.0	1.0	9.6	0.0	87.0	--	400.10	0.0	--	--[a]
		10/27/2021	1251	120	0.0	0.0	6.8	5.7	87.4	--	406.08	0.10	--	--[a]
		1/4/2022	1415	120	0.3	0.3	3.3	0.9	81.8	--	405.00	0.00	--	
		1/25/2022	1131	120	0.1	0.1	2.7	9.2	88.0	0	408.12	-0.02	--	
		2/7/2022	1015	120	0.0	0.0	2.8	8.5	88.7	0	410.84	-1.96	--	
		2/17/2022	1315	120	0.0	0.0	0.5	18.1	81.1	0	409.62	-2.30	--	
		10/6/2022	1320	420	1.1	1.1	15.0	0.0	83.9	0	404.59	-3.07	0.000	
		10/17/2022	1235	420	0.6	0.6	15.3	0.0	84.0	0	404.86	-0.46	0.010	
		11/7/2022	1029	420	0.4	0.1	14.9	1.1	83.8	0	398.20	-0.62	0.000	
		11/21/2022	958	420	0.0	0.0	9.2	8.6	82.1	0	407.58	-0.48	0.000	
		12/5/2022	1500	420	0.0	0.0	9.0	10.4	80.4	0	404.18	-1.84	0.000	
		12/19/2022	959	420	0.0	0.0	4.3	9.7	86.0	0	406.90	-1.97	0.000	
		1/10/2023	1017	420	0.0	0.0	3.7	8.3	88.1	0	396.02	-3.42	0.000	

Table 2. Permanent Soil Gas Monitoring Point Summary

Millpond Crossing

1701 Chapel Drive, Philomath, Oregon

					GEM Landfill Gas Meter Readings[1,2,3,4,5]								Jerome[6,7]	
Monitoring Point	**Screened Interval**	**Date**	**Time**	**Duration (sec)**	**Peak Methane**	**Methane**	**Carbon Dioxide**	**Oxygen**	**Balance Gas**	**H2S**	**Baro Pressure (Inches H2O)**	**Static Pressure (Inches H2O)**	**H2S**	**Notes**
					pbv	**pbv**	**pbv**	**pbv**	**pbv**	**ppm**			**ppm**	
MH2	2-7	10/7/2021	1216	120	0.0	0.0	3.6	13.8	82.7	--	404.32	-0.05	--	--[a]
		10/15/2021	1324	120	0.0	0.0	3.2	14.6	82.2	--	405.67	-0.04	--	--[a]
		10/22/2021	1318	120	0.0	0.0	3.1	14.0	82.7	--	400.10	-0.07	--	--[a]
		10/27/2021	1256	120	0.0	0.0	1.7	17.8	80.4	--	406.08	0.10	--	--[a]
		1/4/2022	1423	120	0.0	0.0	1.3	7.4	80.1	--	405.00	0.00	--	
		1/25/2022	1135	120	0.1	0.1	1.6	19.6	78.6	0	408.12	-0.02	--	
		2/7/2022	1030	120	0.0	0.0	3.5	10.0	86.8	0	410.84	-3.53	--	
		2/17/2022	1325	120	0.0	0.0	0.5	18.0	81.5	0	409.62	-4.62	--	
		10/6/2022	1425	420	0.0	0.0	8.6	11.6	79.8	0	404.59	-3.80	0.000	
		10/17/2022	1410	420	0.0	0.0	0.3	12.0	78.7	0	404.72	-3.58	0.000	
		11/7/2022	1020	420	0.1	0.1	9.2	10.6	80.1	0	398.20	0.00	0.000	Valve open
		11/21/2022	945	420	0.0	0.0	4.7	16.1	79.2	0	407.58	1.12	0.000	
		12/5/2022	1450	420	0.0	0.0	4.9	12.1	83.0	0	404.18	-0.74	0.000	
		12/19/2022	946	420	0.0	0.0	3.8	16.3	79.9	0	406.90	-0.53	0.000	
		1/10/2023	1009	420	0.0	0.0	4.3	15.7	80.0	0	396.02	-1.70	0.000	
Oregon DEQ Site-Specific Action Levels						**1.25**	NS	NS	NA	**0.0467[a]**			**0.0467[a]**	

-- [a]: pressure transducer error

NA: not applicable

NS: not set for this analyte

pbv: percent by volume

ppm: parts per million

[1]Methane accuracy is +/- 0.3 pbv for concentrations 0-5 pbv, +/- 0.5 pbv for concentrations 0-70 pbv, and 1.5 pbv for concentrations 70 to 100 pbv

[2]Carbon dioxide accuracy is +/- 0.3 pbv for concentrations 0-5 pbv, +/- 0.5 pbv for concentrations 0-60 pbv, and 1.5 pbv for concentrations 60 to 100 pbv

[3]Oxygen accuracy is +/- 1 pbv for concentrations between 0 to 25 pbv

[4]Hydrogen sulfide accuracy for GEM 5000 is +/- 2 ppm for concentrations 0 to 500 ppm

[5]Barometric and static pressure accuracy is 0.01 inches water column (inches H2O)

[6]Hydrogen sulfide accuracy for Jerome J631 is +/- 0.003 ppm at 0.05 ppm, +/- 0.03 ppm at 0.5 ppm, +/- 0.3 ppm at 5 ppm

[7]Jerome J631 used only when GEM 5000 readings were below 2 ppm

[a]Action level proposed by DEQ on April 7, 2022

Most Recent Monitoring Event