

April 14, 2026

Luke LeMond  
Site Manager  
Solid Waste Program  
State of Washington Dept. of Ecology  
Central Regional Office  
1250 West Alder St.  
Union Gap, WA 98903-0009

Re: DTG Yakima – Agreed Order No. DE 21624 – Monthly Progress Letter – March

Dear Mr. LeMond:

In accordance with Section 7.3 of Agreed Order (AO) No. DE 21624, the following is a description of the actions taken during March 2026 to implement the requirements of this AO.

Activities:

On-site activities included weekly gas probe and every other week ambient monitoring. A regulatory review meeting was held March 6, 2026. The monitoring data summary through March 2026 from Landfill Fire Control, Inc. (LFCI) is attached.

Q1 landfill gas monitoring was performed March 4 and submitted to Ecology along with perimeter H<sub>2</sub>S monitoring.

Draft Interim Action Work Plan (IAWP) comments were received from Ecology on March 5, a review call was held to the March 6, a second IAWP call was held on March 12, and a draft response letter was submitted on March 17 to confirm revisions needed.

Q1 groundwater monitoring was performed the week of March 16.

The Q4 MTCA TM was submitted to Ecology on March 30.

The Thermistor Installation Report was submitted to Ecology on March 30.

Deviations from Plans (if any):

None.

Deviations Description from the Scope of Work and Schedule:

None.

All Data Received or Collected:

Ambient and gas probe data for gases and temperature were emailed, separately, to Ecology weekly after measurements were taken. Gas probe data was entered into the tracking spreadsheets and assessed by LFCI. The summary of the data has been included as an attachment.

**Address**

22745 29th Dr. SE, Ste 200,  
Bothell, WA 98021

**Contact**

425 549 3000  
dtgrecycle.com

Deliverables for the Upcoming Month:

Deliverables will include:

- Weekly ambient and gas probe data
- April Progress Report
- 2025 Annual Groundwater Report

Please contact me to discuss any of the above items.

Respectfully,



Ian Sutton  
Sr. Director of Engineering  
DTG Recycling  
[isutton@dtgrecycle.com](mailto:isutton@dtgrecycle.com)

Enclosures: LFCI Data Update – March 2026

cc: [mbrady@parametrix.com](mailto:mbrady@parametrix.com)  
[steven.newchurch@co.yakima.wa.us](mailto:steven.newchurch@co.yakima.wa.us)



## Providing a full range of landfill fire control and prevention services.

- Fire Safety Training
- Fire Safety Audits
- Fire Prevention and Response Plans
- Fire Extinguishment Strategies
- Fire Extinguishment Services
- Fire Monitoring
- Environmental Monitoring
- Forensic Investigations

April 10<sup>th</sup>, 2026

LFCIPRJ-2023-001

Mr. Ian Sutton, Director of Engineering  
DTG Recycle  
P.O. Box 14302 Mill Creek, WA 98082

By email: [isutton@dtgrecycle.com](mailto:isutton@dtgrecycle.com)

### **Re: Monthly Data Assessment Report DTG Yakima Landfill Fire Incident – March 2026**

Dear Mr. Sutton,

LFCI has prepared a monthly review and update of gas and temperature monitoring data that is being collected at the DTG Recycle Landfill Fire in Yakima, Washington. The update includes maps showing the spatial distribution of temperature, carbon monoxide, and oxygen within the monitoring area and presents the data collected, highlighting trends and interpreting the results.

Following the continued slow signs of suppression observed in the past several months and a levelling trend observed in 2025, the month of March has continued to show this slow response with CO and temperatures relatively stable or decreasing over the past few months. Temperature in T-1 and GP-3 has continued the decreasing trend, and the recently installed T-4 has continued to indicate higher but decreasing temperatures. These high temperatures have started decreasing again following a brief heating trend between mid February and late March, particularly in GP-3.

The elevated temperatures in T-4 are isolated from the other elevated areas although the temperatures are very similar. LFCI believes that this may have been a secondary hotspot when the fire was first detected, but the temperatures are following the same trends as GP-3 and T-1. Through close monitoring, the extended high CO and temperatures have lead LFCI to recommend additional cover in that area to address the slopes that were cut into to install T-4. Since the soil was placed in, CO and temperature have continued to slowly decline.

When continuing to look at long term trends, the collected data has indicated that the subsurface smolder has become much less active since the soil cover was applied. A concern has been recognized with oxygen levels increasing throughout the past few months to highest levels observed to date in many wells (see spatial maps of O2). This suggests that the soil cover may be dessicating and cracking to some degree.

Further to this, LFCI has noted a seasonal trend in oxygen levels, with elevated oxygen levels occurring in summer months and lower oxygen levels in winter months. It was previously speculated that these trends were correlated with atmospheric pressure swings; however, as the highest oxygen levels are being observed in the summer months when average atmospheric pressures are low, and short term pressure swings are less intense, it is now believed that the reduced oxygen levels are more likely the result of frozen ground conditions and snow cover which inhibits air entry into the landfill in the winter months. This means that

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LANDFILL FIRE CONTROL INC.

#8-1225 East Keith Rd., North Vancouver, BC – V7J 1J3  
P: (604)-986-7723 E: [sperling@sperlinghansen.com](mailto:sperling@sperlinghansen.com)  
[www.landfillfire.com](http://www.landfillfire.com)



LFCI expects the upcoming spring months to show increasing oxygen levels within the waste mass.

Plotting the temperature data in plan view clearly shows that the area affected by fire has markedly decreased over time. As stated in previous monthly updates, LFCI believes that the data shows a small smolder continues to be active near GP-3, and that the rate of combustion of the smolder is steadily decreasing, however slowly. Based on the extinguishment target of temperature dropping below 180°F, we continue to project that the fire will be declared extinguished within the year (summer 2026). However; if the temperature response continues to level off around 300 F, additional intervention may become necessary.

Based on this assessment, LFCI recommends that monitoring continue on a weekly basis until it can be shown that CO levels in all locations have decreased to below 500ppm, once corrected for cross sensitivity effects. At that time, monitoring can be decreased for prevention purposes. Given the recent response and the reduced timeline now projected to extinguishment, LFCI continues to have the professional opinion that further intervention is not warranted at this time.

We trust that this report provides the information you require, and should you need anything else please don't hesitate to contact the undersigned.

Sincerely,

**LANDFILL FIRE CONTROL INC.**

**Dr. Tony Sperling, P.Eng.**  
President



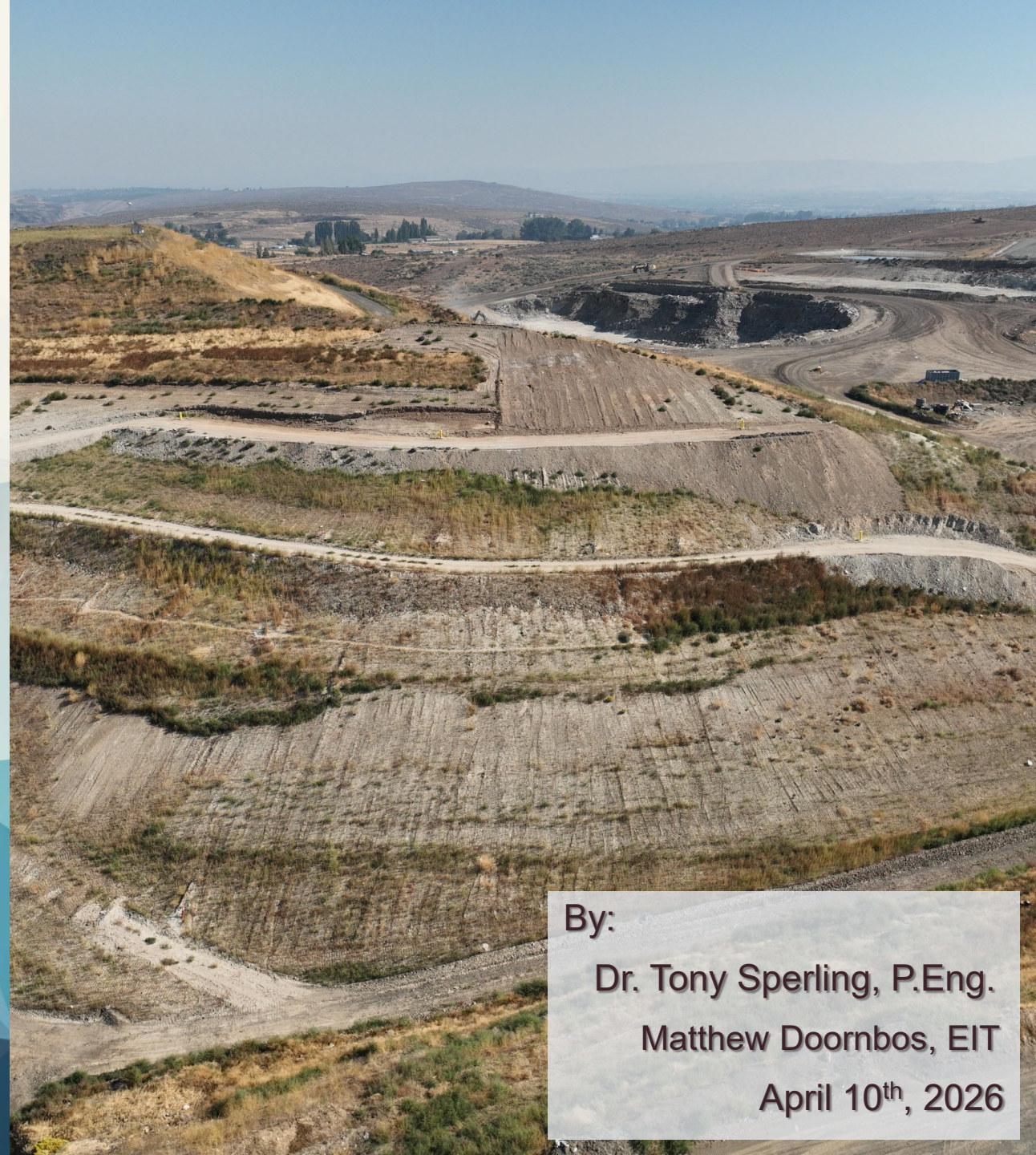
*April 10<sup>th</sup>, 2026*



# DTG LPL LANDFILL FIRE INVESTIGATIONS AND MITIGATION

Monthly Monitoring Data Review

March, 2026



By:

Dr. Tony Sperling, P.Eng.

Matthew Doornbos, EIT

April 10<sup>th</sup>, 2026

# Introduction

## **BHP Locations**

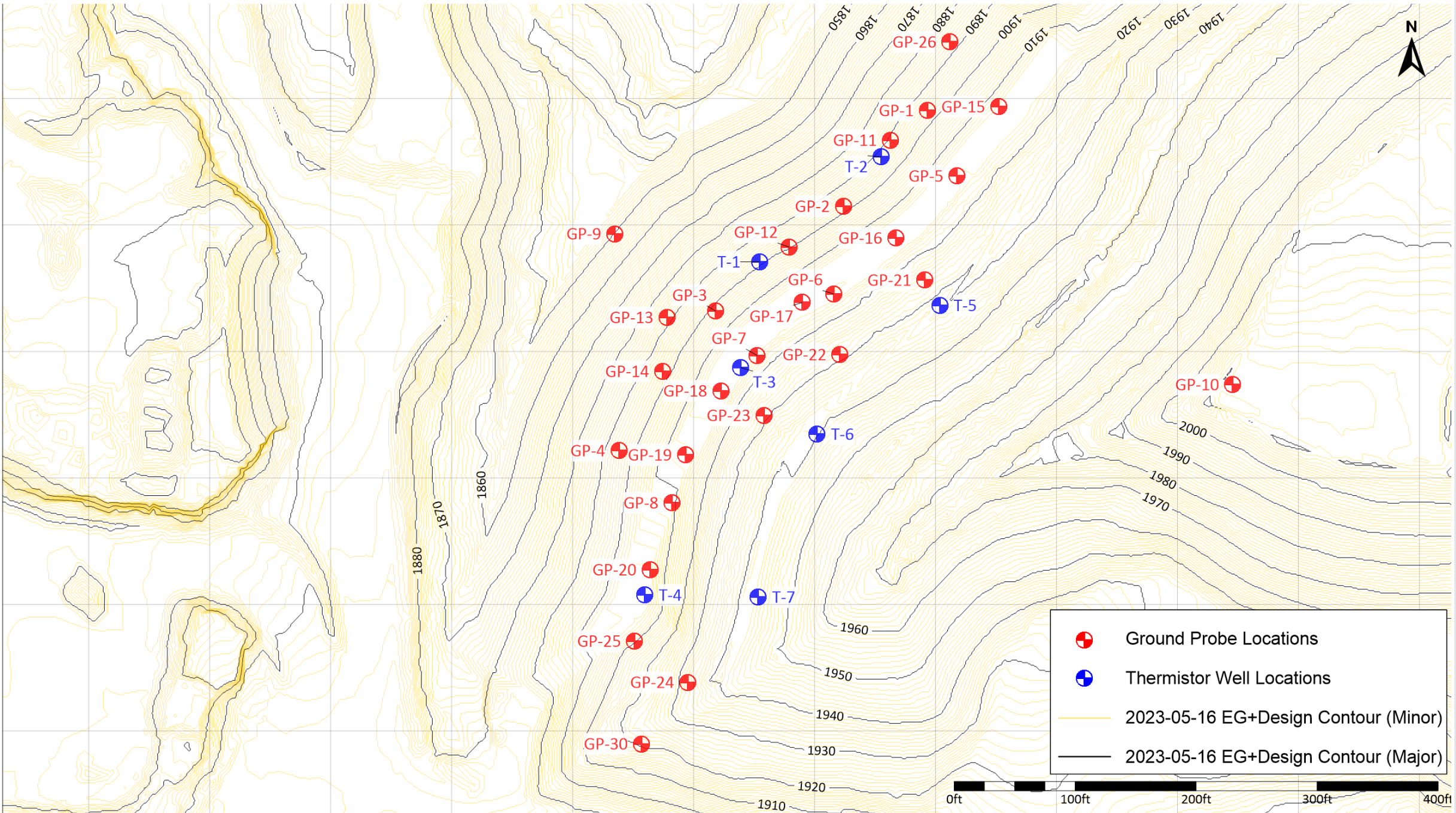
- There have been 31 Ground Probes installed, 3 of which are no longer monitored. 26 probes are monitored weekly, and 2 are monitored on a bi-weekly basis.
- Three thermistor wells were installed in mid-2023, which are monitored at varying depths to better determine the location of the hotspot.
- Four more thermistor wells were installed in mid-2025 to better determine the extent of the area with elevated temperatures as the fire comes closer to extinguishment.

## **Monitoring Data Review**

- The monitoring locations are measured for levels of gas that would indicate a fire or increased thermal activity, including Carbon Monoxide, Oxygen, VOCs, Hydrogen, Hydrogen Sulfide, and Methane.
- In addition to gas levels, the temperature in each well is recorded.

## **Overall Interpretation**

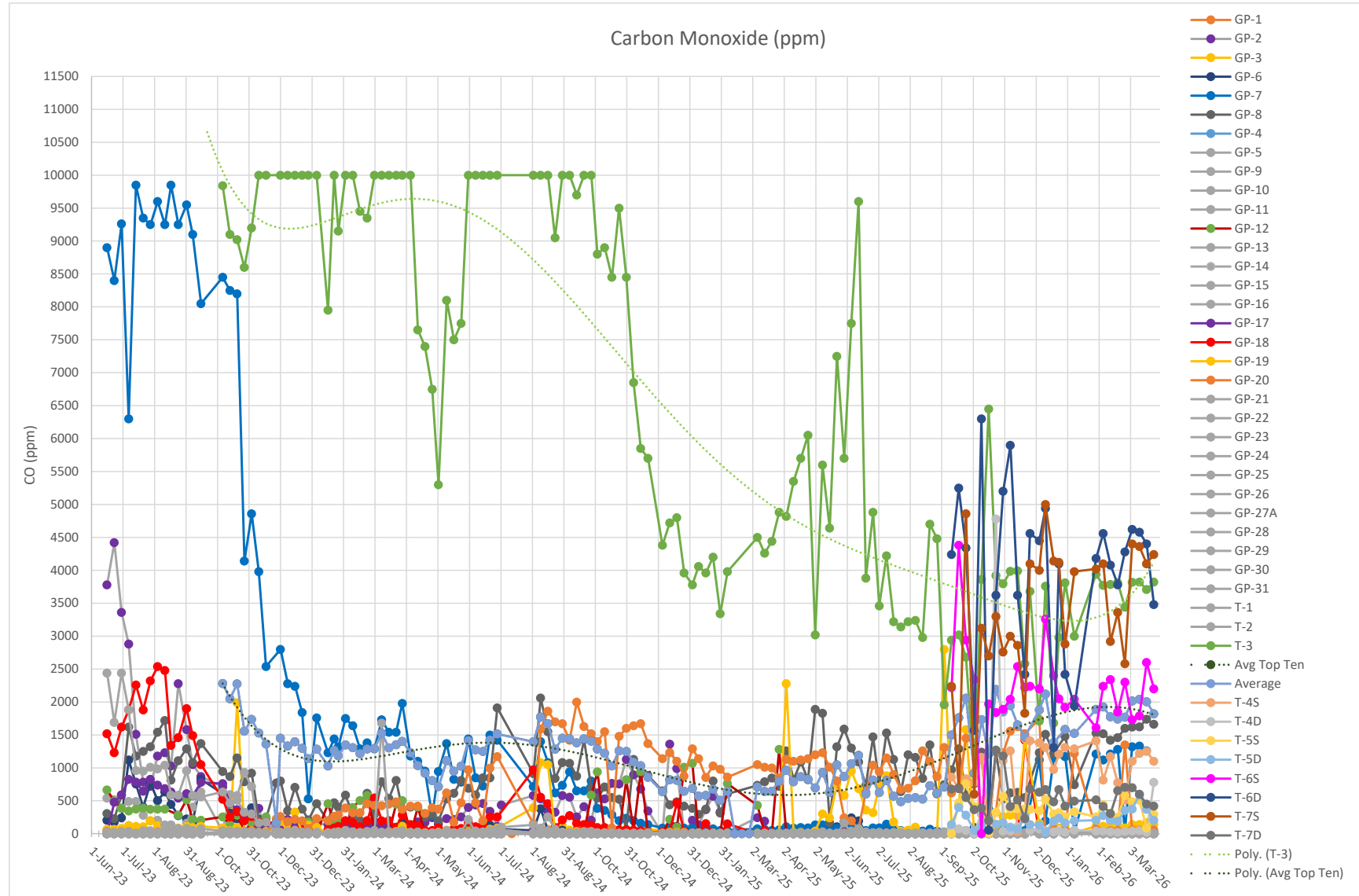




# Carbon Monoxide

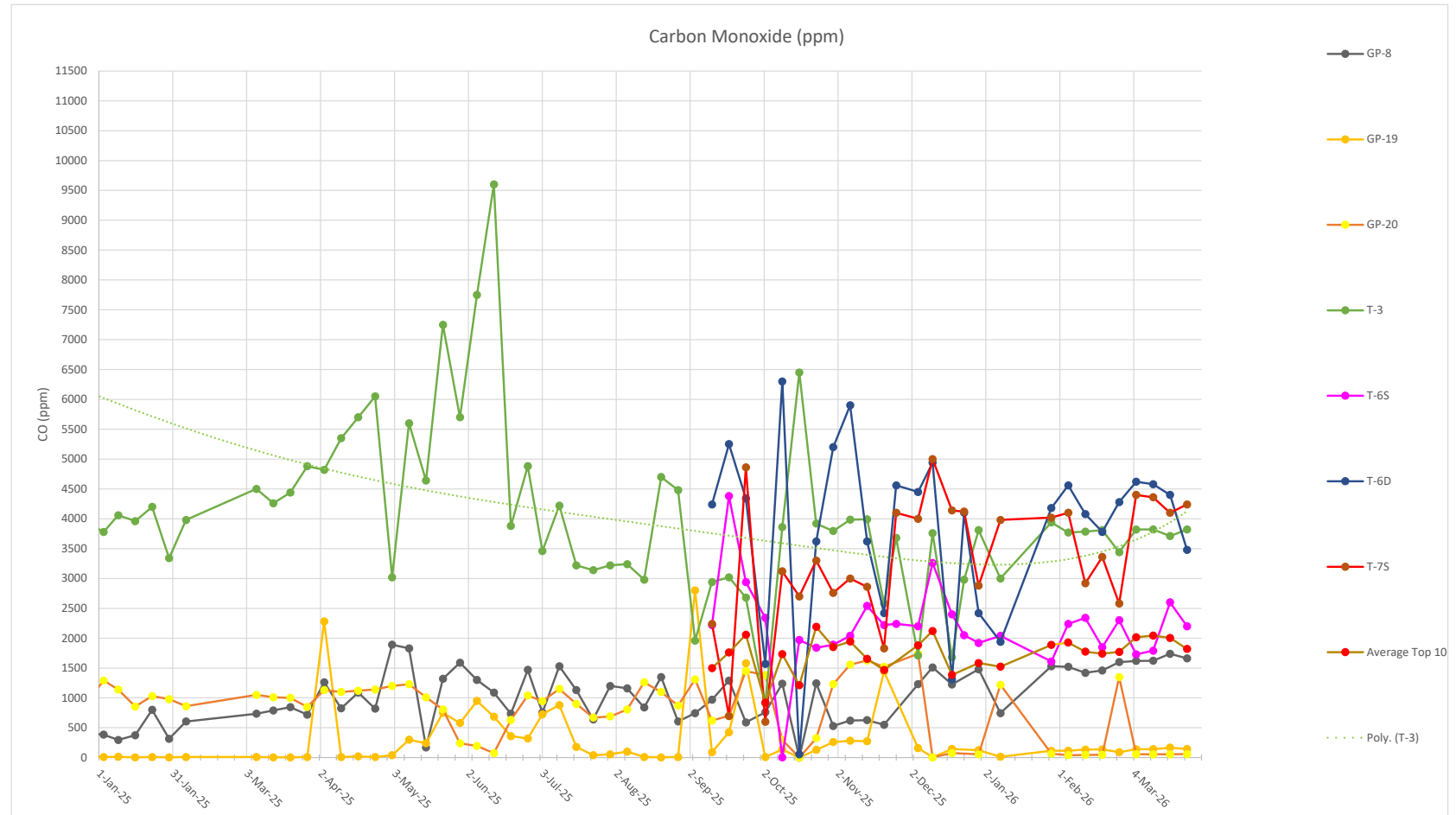
The month of March saw varied CO levels in monitored wells between the four monitoring events in the month, however three wells remain higher than the rest at around 4000ppm: T-3, T-6D, and T-7S. These are all in the southeastern quadrant of the monitoring area, with the measurements seeming to confirm LFCI's 'chimney' hypothesis – gases are venting from the hotspot in the GP-3 and T-4 areas up the hill to the southeast.

The average of the highest 10 wells has been slightly higher than previously at closer to 2000ppm compared to previous 1700ppm levels.



# Carbon Monoxide 10 Highest

CO levels in the area of the new thermistors T-4 to T-7 has encountered higher CO levels due to the second zone of smolder activity. As shown by the average CO level plot, CO levels since Sept. 2025 are fluctuating between 1,500 and 2,000 ppm. In March of 2026 there has been a slight increase at the beginning of the month which has now decreased to levels similar to the end of February.

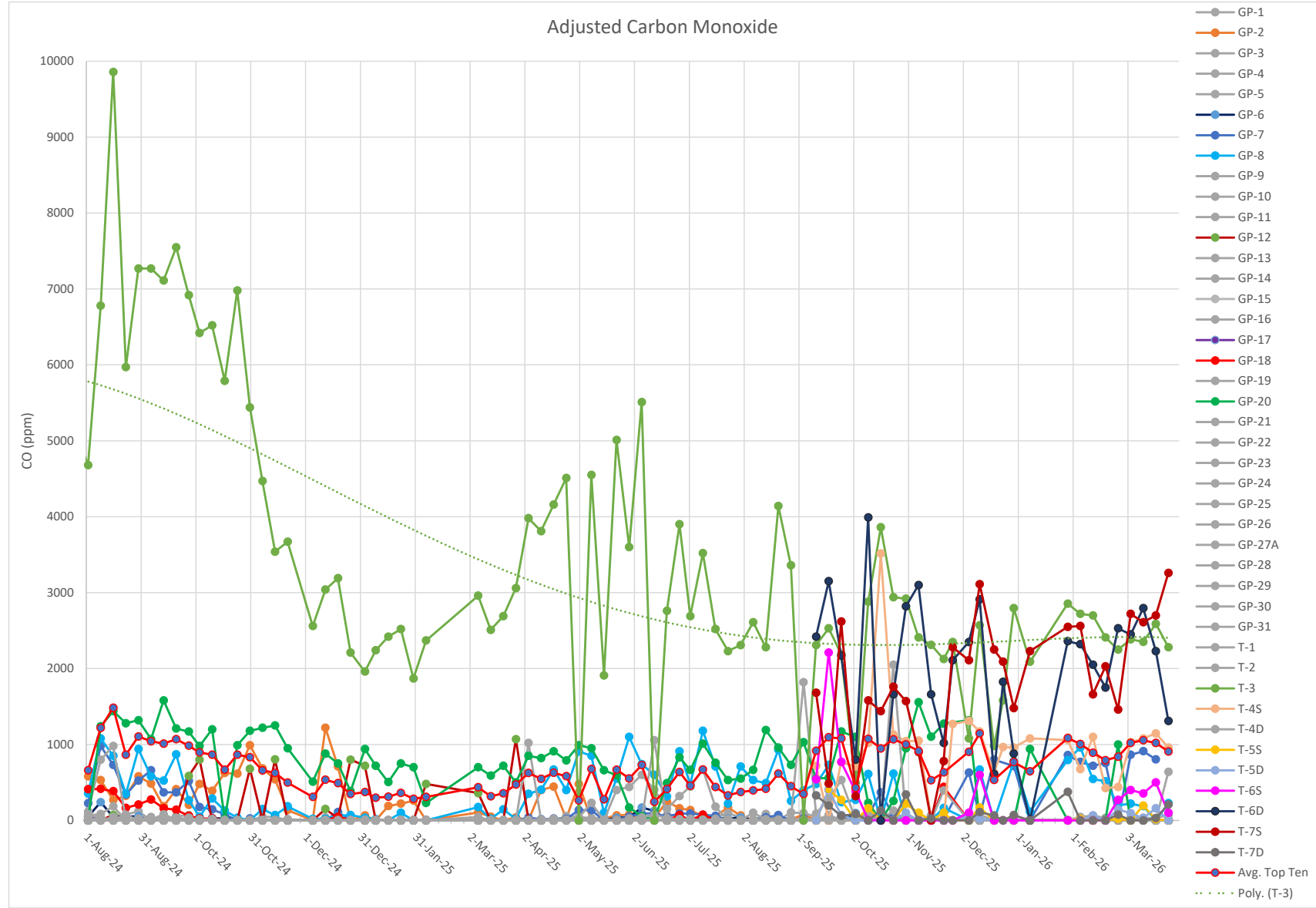


# CO Adjusted for H2 Gas

Adjusted CO measurements have shown somewhat increased but varying levels of carbon monoxide between January 2025 and early June 2025, followed by a decrease in June through August 2025. March 2026 saw generally consistent measurements, but CO levels in T-6D plummeted in the last monitoring event of the month from 2800 to 1300 ppm.

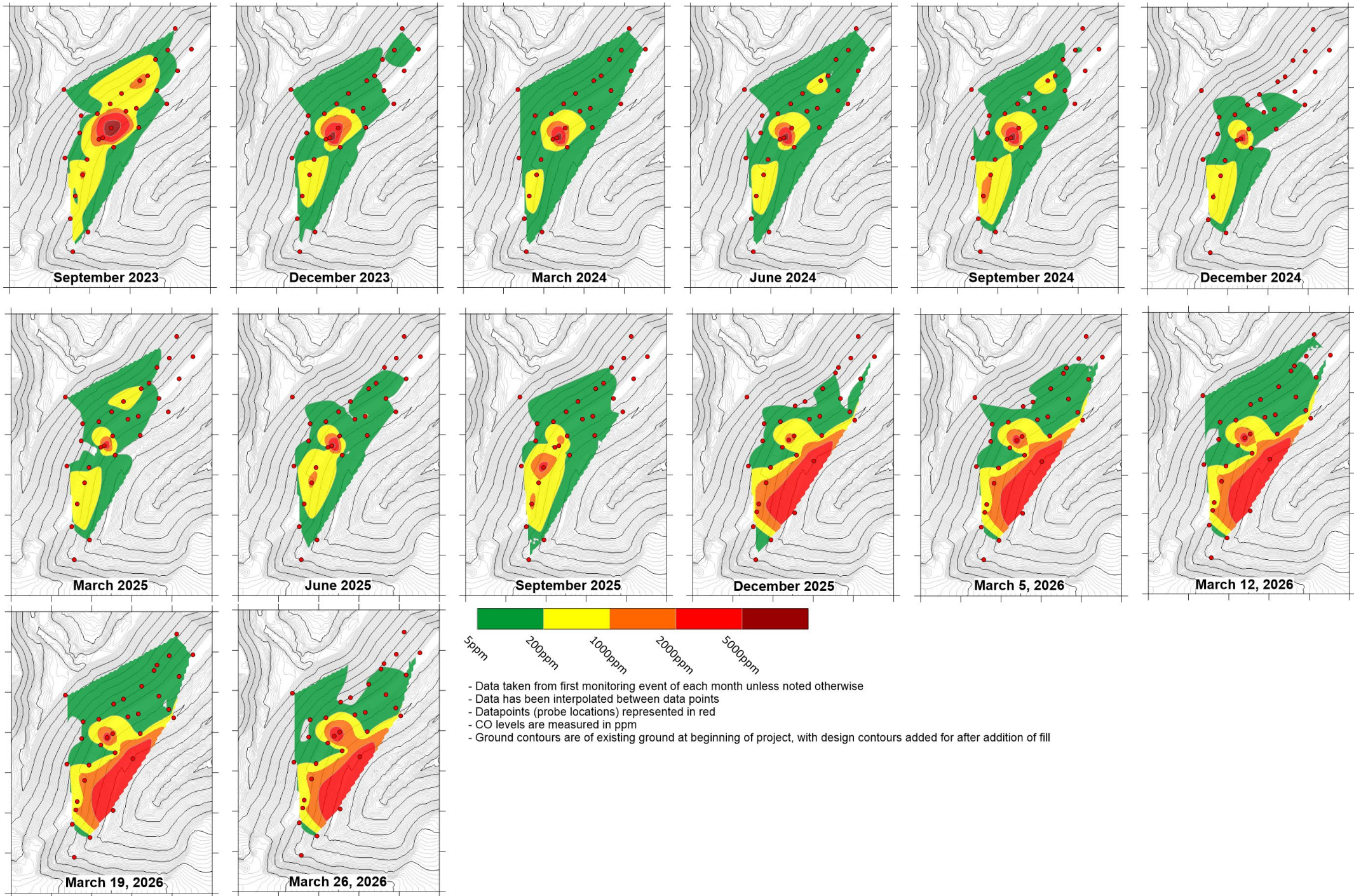
The newest thermistor wells are reading generally higher levels in the deeper readings compared to the shallower readings. LFCI has continued to closely monitor these new thermistors and has not realized any concerning trends.

The most recent CO heat map shows CO is generally steady across the site, with elevated CO levels in the new wells. The two monitoring events in January have shown an increase in CO levels. T-3, T-6D, and T-7S are still similar in levels, but closer to 2600ppm when adjusted.



# CO Levels by Individual Wells

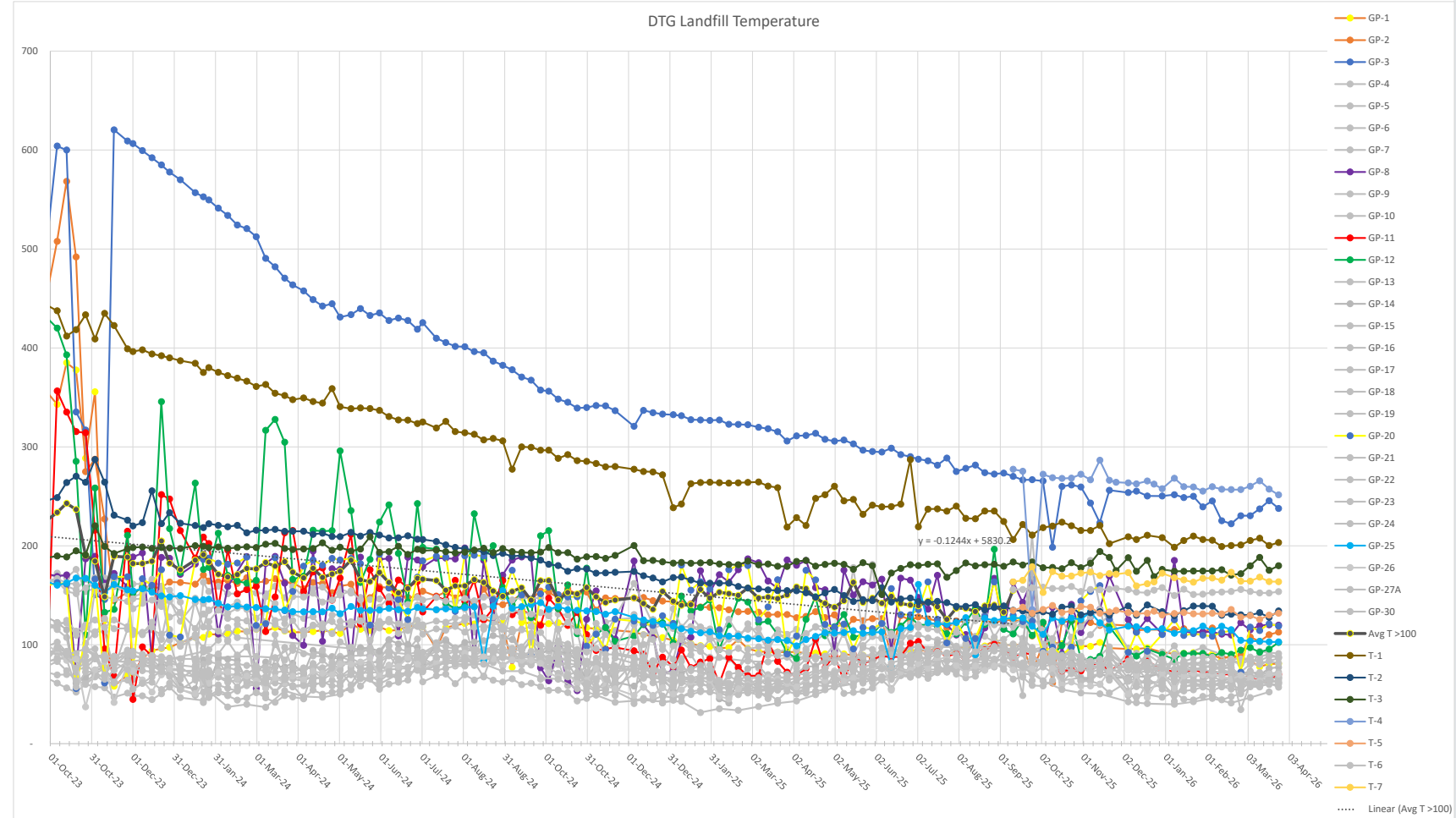




# Temperature (F)

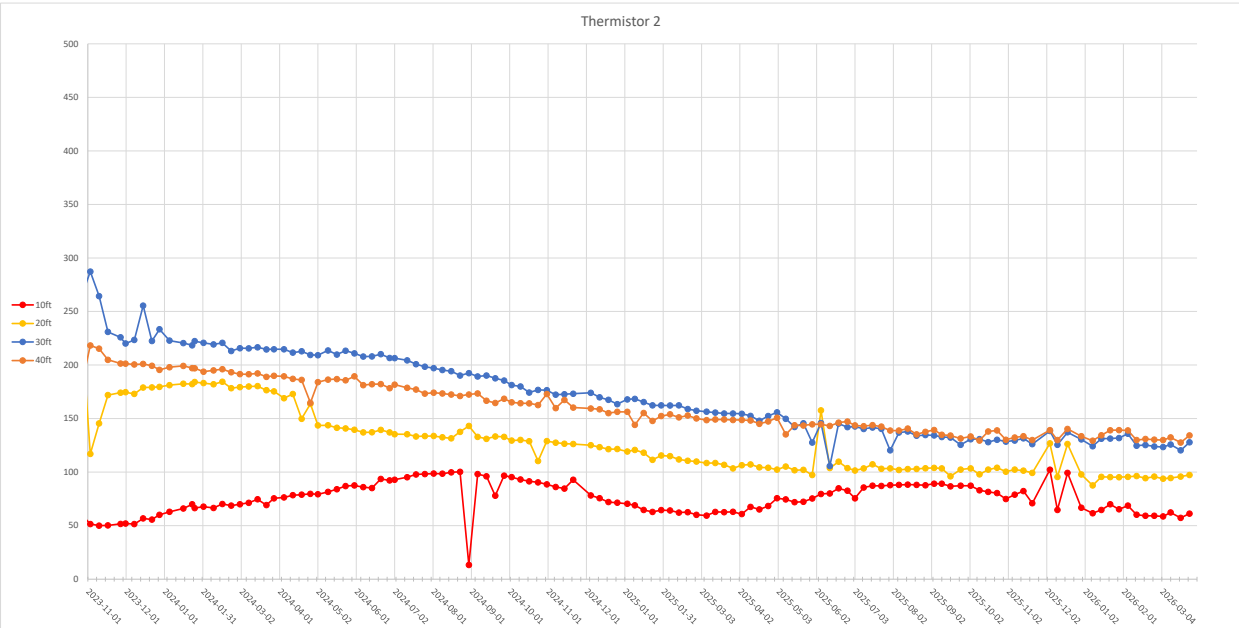
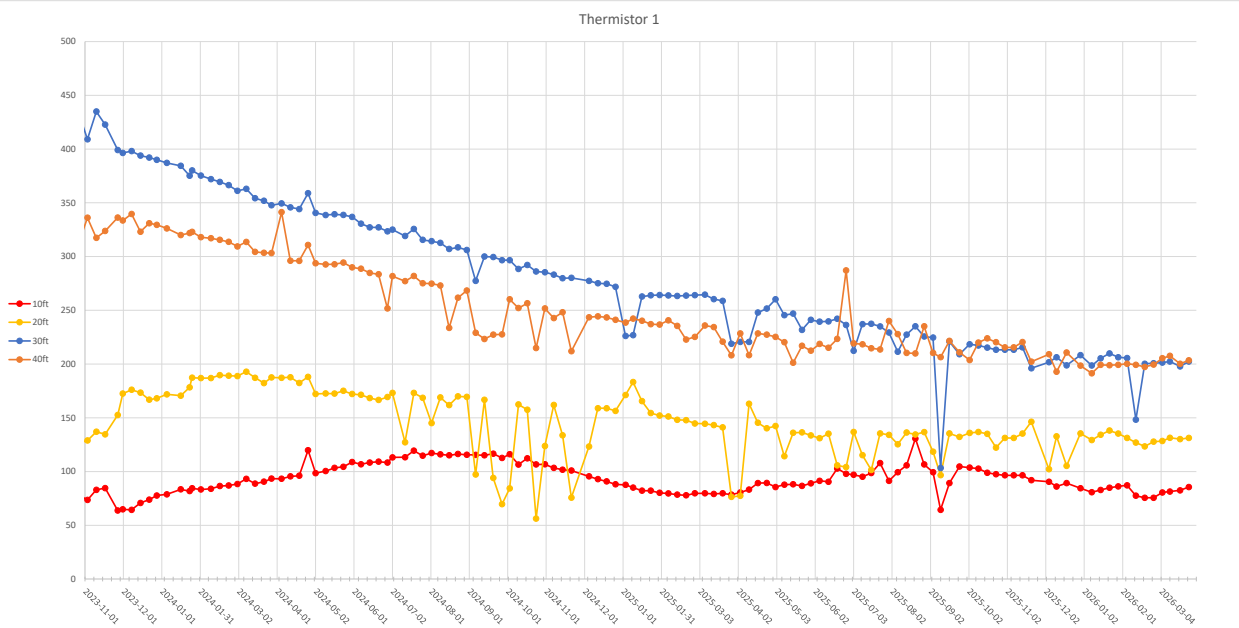
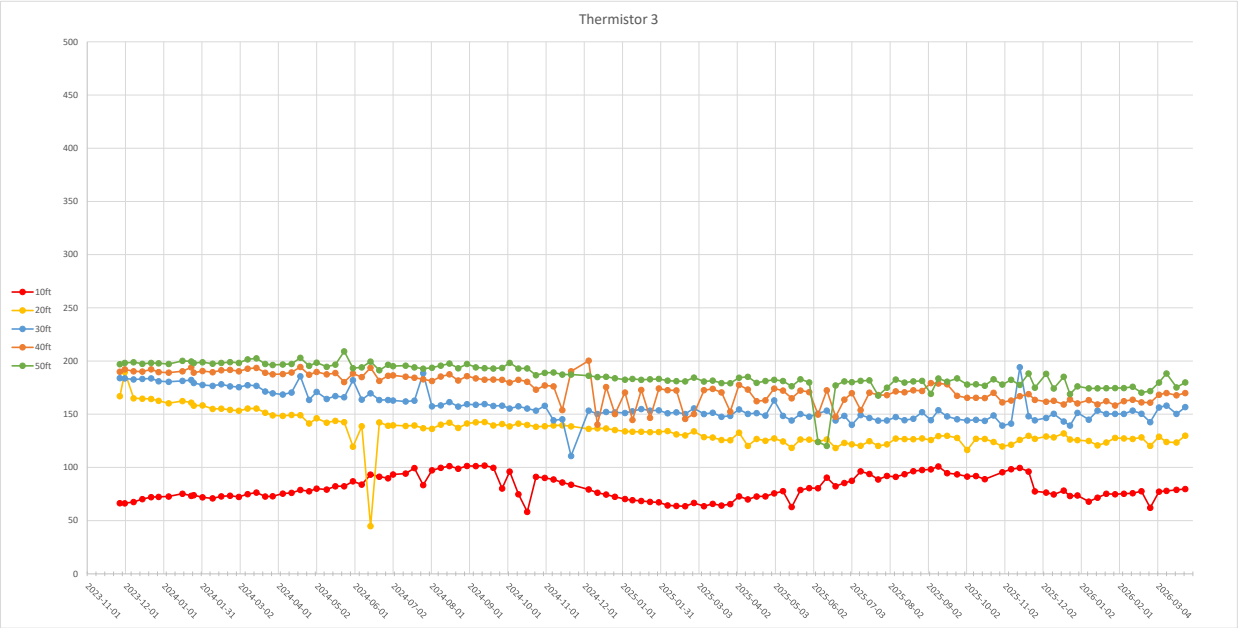
March monitoring saw an increase in temperature in GP-3 and T-4 which has now started decreasing in the latest monitoring events. The low temperature wells (gray) continue to show the expected seasonal trend.

LFCI continues to see overall decreasing trends in the three hottest locations (GP-3, T-4, and T-1). The late increases that have now started decreasing are not of major concern at this time but will be monitored closely to ensure decreasing trends resume.



# Thermistor Temperatures (T1-T3)

Thermistor temperatures are generally trending downward, but the rate of cooling appears to be slowing in T-1, which is the hottest well. There is a slight warming in T-3 at depth, which is believed to be on account of radiant heat effects as gases vent through the soil near this location. Shallow locations in all three thermistor wells continue to show seasonal warming and cooling trends.

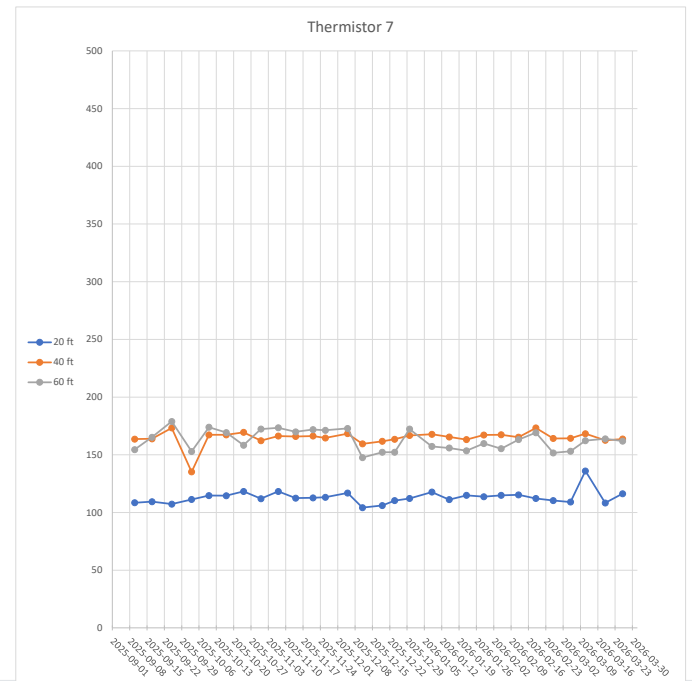
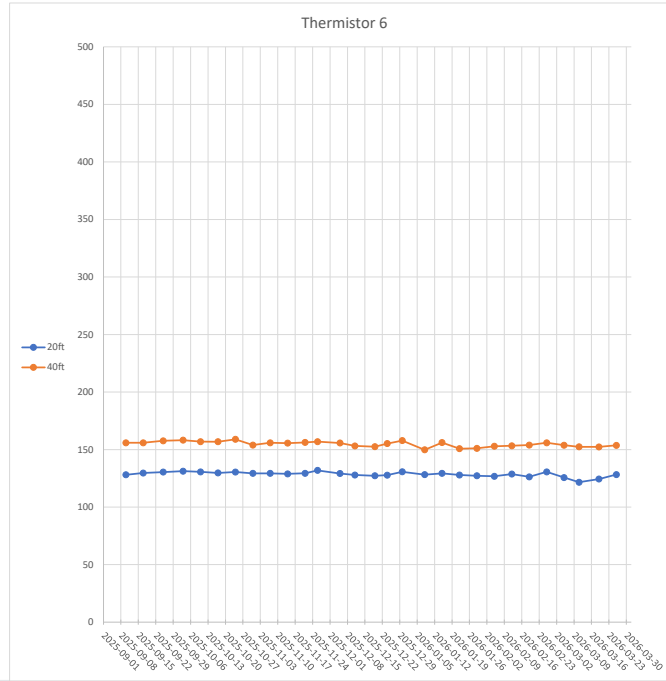
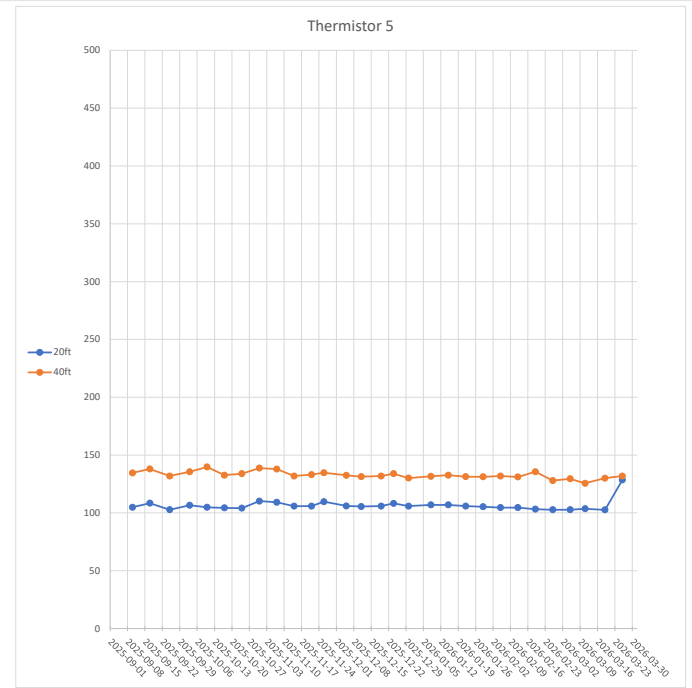
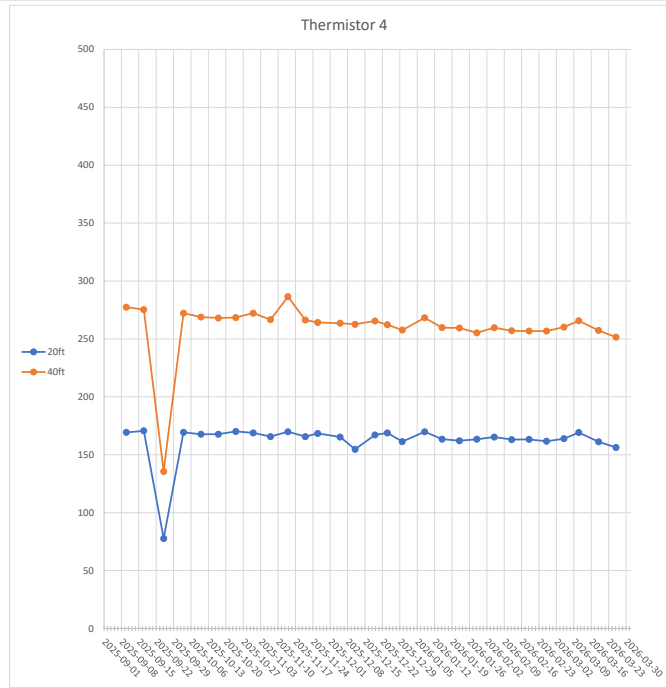


# Thermistor Temperatures (T4-T7)

After six months of data, the new thermistor temperatures seem generally stable with a slightly declining trend in T-4 similar to the other high temperature wells. The other thermistors installed in 2025 exhibit generally cooler temperatures with no visible increasing or declining trends.

The observed temperatures in the wells of 100 to 150F are normal temperatures of aerobically active landfills and at the low end of temperatures seen across the site. However, T-4 is exhibiting elevated temperatures similar to that seen at the hotspot in GP-3. 275F is 135C, which is an abnormally high temperature indicative of nearby smoldering activity.

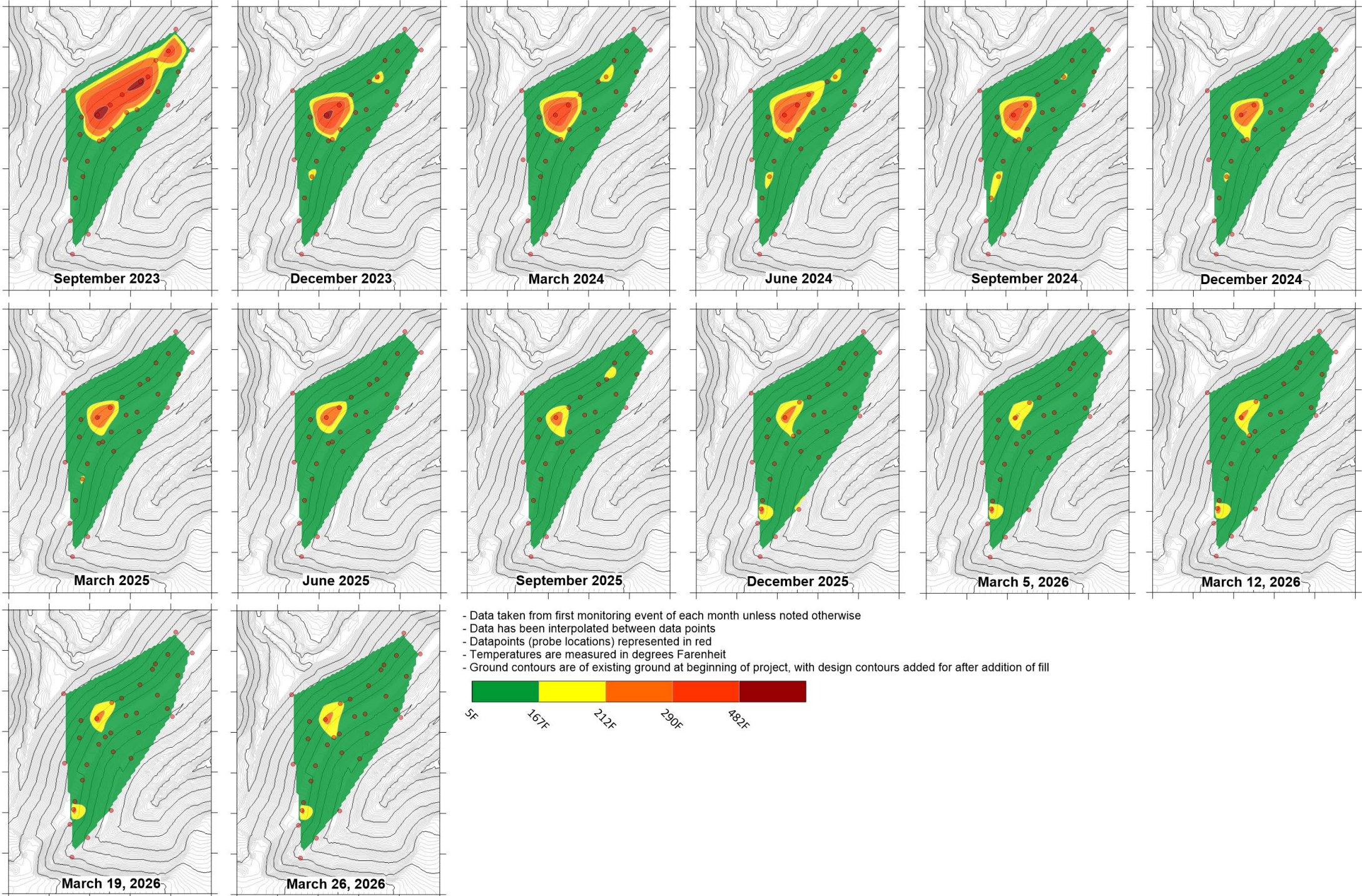
With the elevated CO readings in the area, the data suggested that the smolder which was at the edge of the soil application zone was becoming more active. The monitoring readings have indicated a cooling trend in January which has continued into February and March, suggesting that the hotspot is continuing to stabilize.



# Heat Map Interpretation

The heat map shows that the main fire zone has been cooling over time and that the smolder is being effectively contained. However, a new hot zone has been identified in the southern portion of the site around T-4 and GP-20 since late 2025. During LFCI's initial site inspection active smoke and elevated temperatures were noted in that area, and this area was covered with soil as part of the initial fire response. LFCI has been concerned that the road cuts recently undertaken had opened up an air intrusion pathway which has increased oxygen availability and re-initiated the smolder in that area.

In consultation with DTG staff, LFCI recommended that additional fill be placed against the exposed slopes created during thermistor installation. This recommendation was then implemented and temperatures continued to fall through the February and March monitoring events.

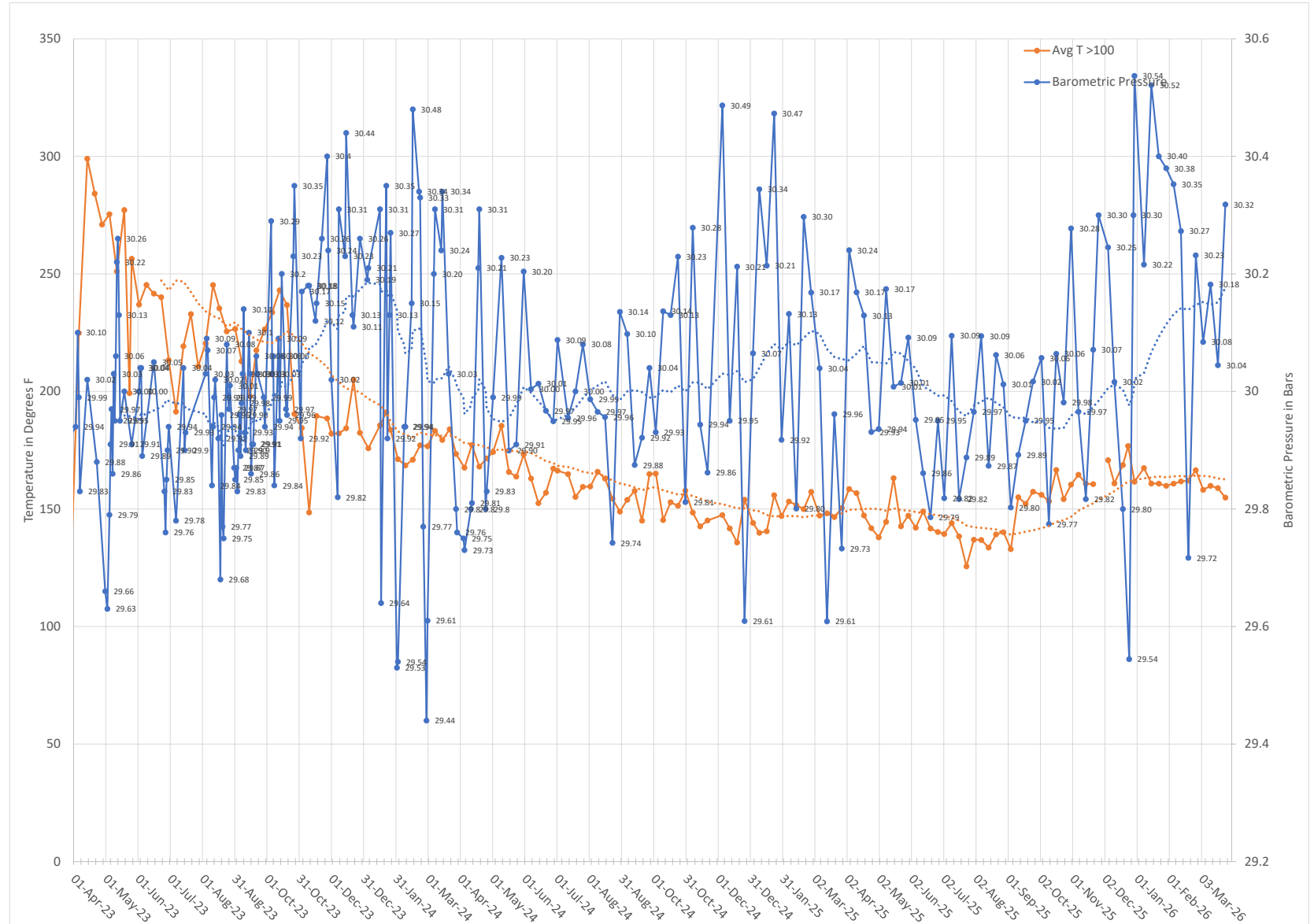




# Barometric Pressure

As LFCI expected, the site is continuing to experience higher pressures as the winter season continues. Based on past pressure trends, it is anticipated that this high-pressure environment will begin to decrease through April, which may result in less oxygen availability provided there are no major short term pressure swings such as that experienced in late December, 2025.

As the season changes and ground thawing / snowmelt occurs, it will be important to maintain integrity of the soil cover and to address any erosion damage.



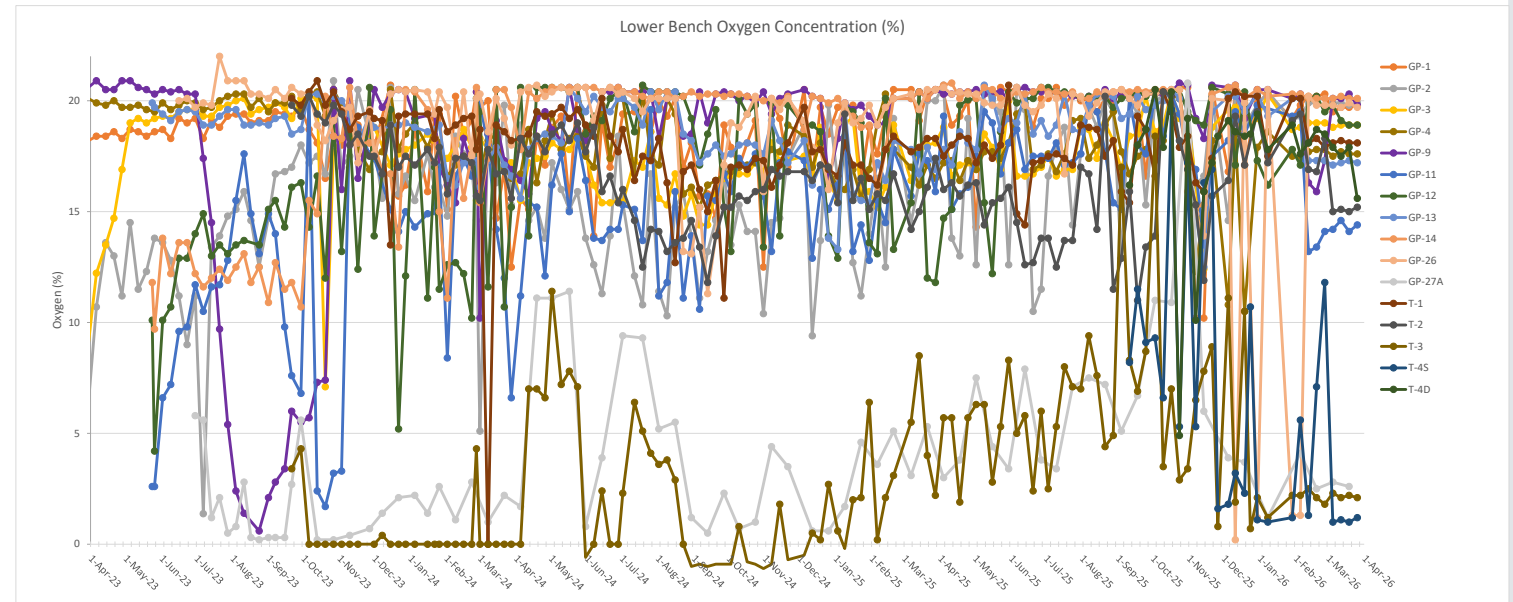
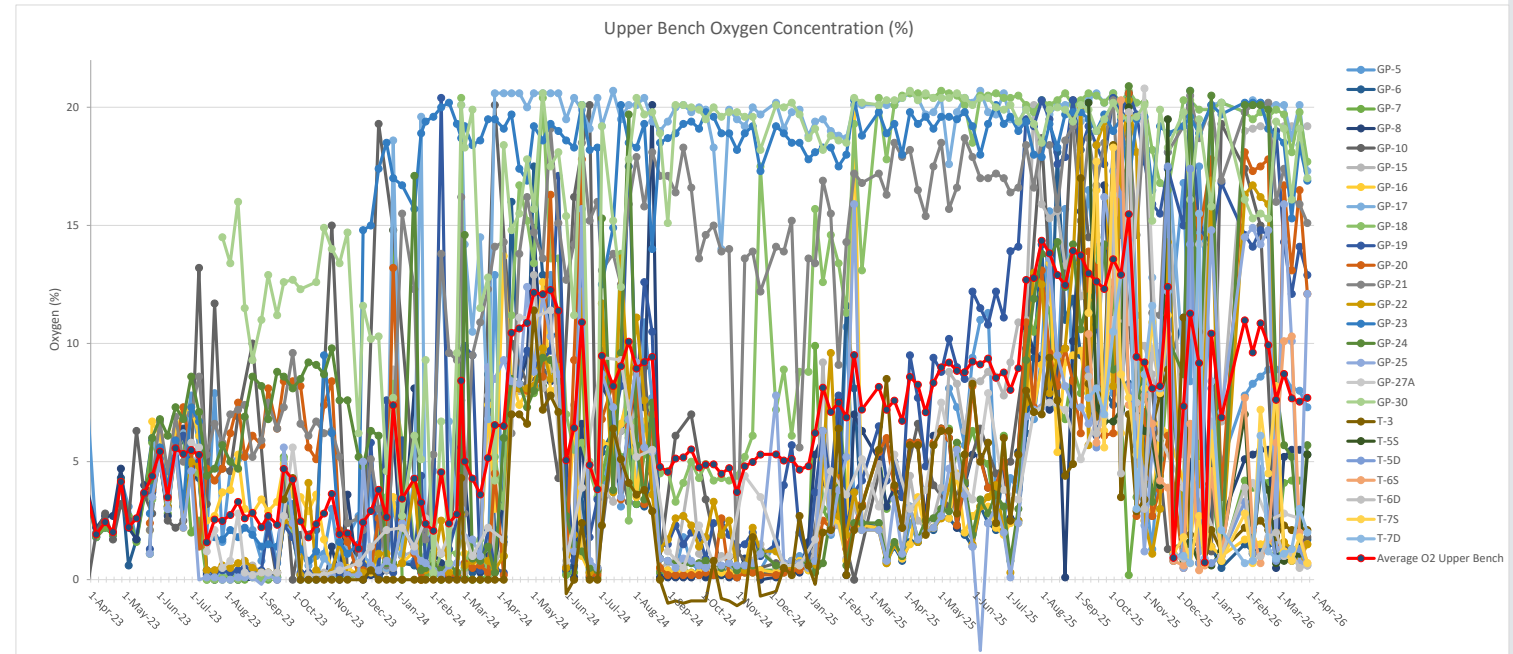
# Oxygen

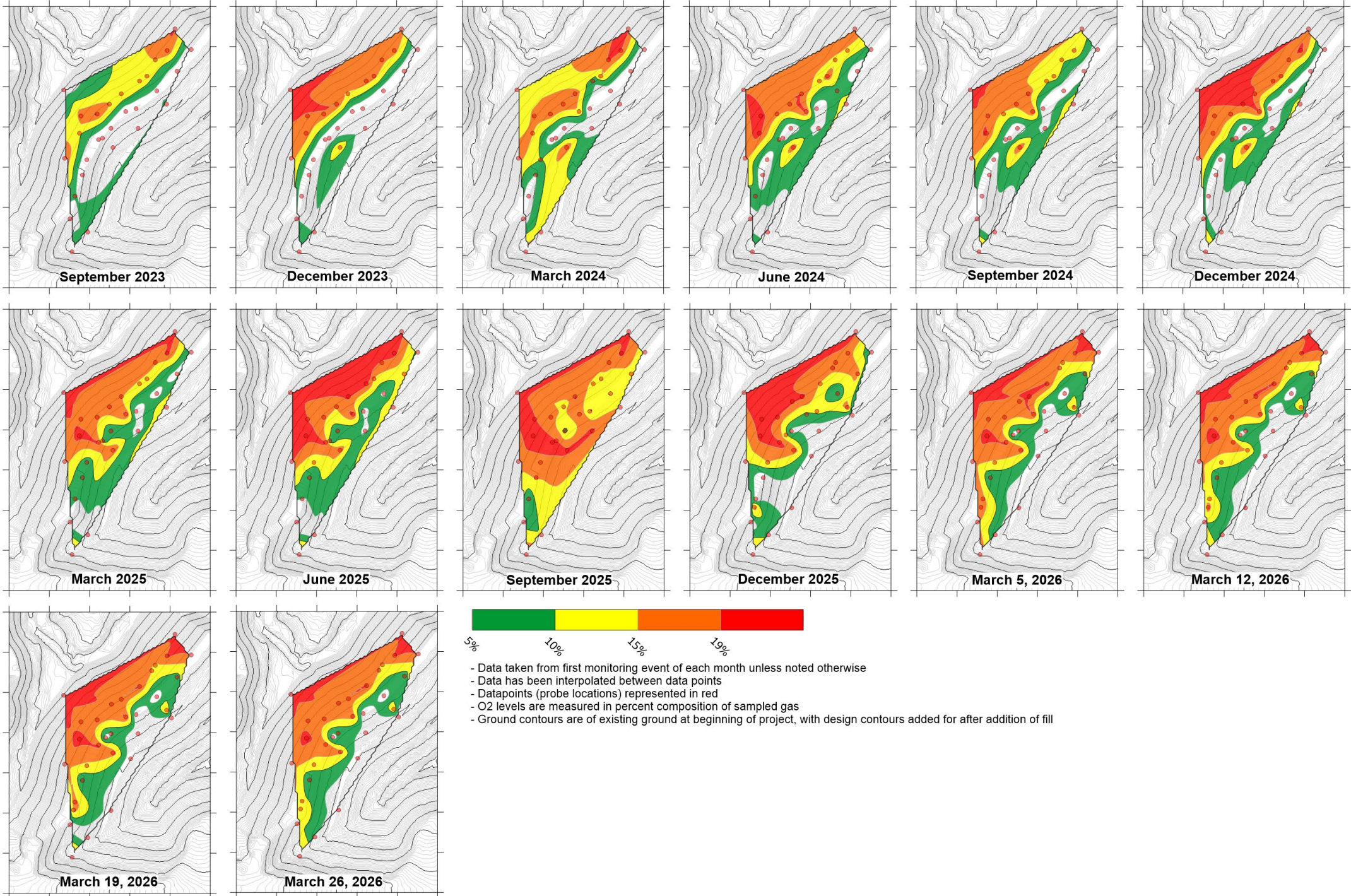
The oldest portion of the landfill is likely relatively inert and biologically inactive, producing very little methane. As a result, the pore space is full of atmospheric air leading to the generally high oxygen concentrations. The time series plots are difficult to read due to large swings in some of the wells, however in plan view, oxygen levels appear to have been increasing since January of 2025. The latest monitoring events have shown that oxygen may be decreasing in the lower bench, but oxygen levels in many of the GPs in the upper bench appear to oscillate seasonally, with higher oxygen levels in the summer months. Initially, it was suspected this was related to atmospheric pressure swings; however, the highest average pressure and greatest swings occur in the winter, while highest oxygen levels occur in the summer. It is now theorized that oxygen entry in the winter is inhibited by snow cover and frozen soil.

An incursion of atmospheric air has been detected in upper bench oxygen concentrations starting July 1, 2025. Areas on the plan view that were consistently green (<10% O<sub>2</sub>) have changed to yellow (<15% O<sub>2</sub>) or orange (<20% O<sub>2</sub>). Such a trend has been detected previously starting April 1, 2024. Both events were preceded by very large fluctuations in atmospheric pressure of up to 1 Bar.

April 2024 triggered a smolder resurgence based on CO, as did Jan 1 2025 O<sub>2</sub> increase. The July 1 2025 increase seems to have caused a similar increase.

The surface of the fire area was examined in November, 2025 for evidence of air intrusion such as cracks or erosion rills, and no evidence of air intrusion was found.





# Volatile Organic Compounds

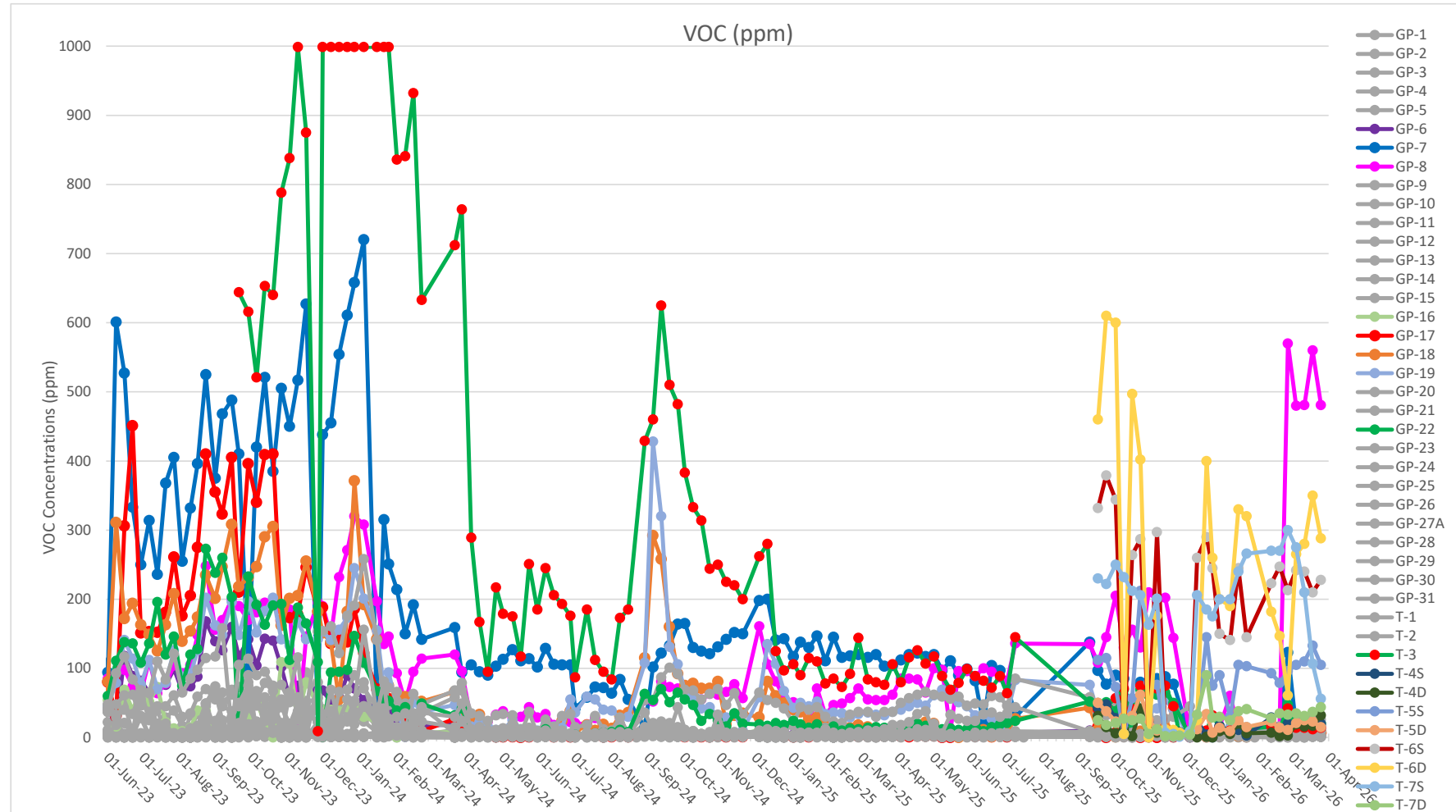
T-6 has previously contained the highest VOC concentration at the site, and the previously low level recorded in February has increased from 61ppm to 288ppm. T-6S has remained around previous levels between 213ppm and 247ppm.

The shallow portion of T-7 has decreased to 56ppm, while the deeper portion continues to remain low around 30 – 40ppm.

As T-6 and T-7 are deep in the landfill, they are less impacted by dilution effects of atmospheric air cycling in and out of the landfill during pressure swings. Higher VOC concentrations can be expected.

GP-7 and GP-8 were noted as outliers in the latest monitoring data in March, however GP-8 has not decreased and instead has remained high around 480ppm in the last month.

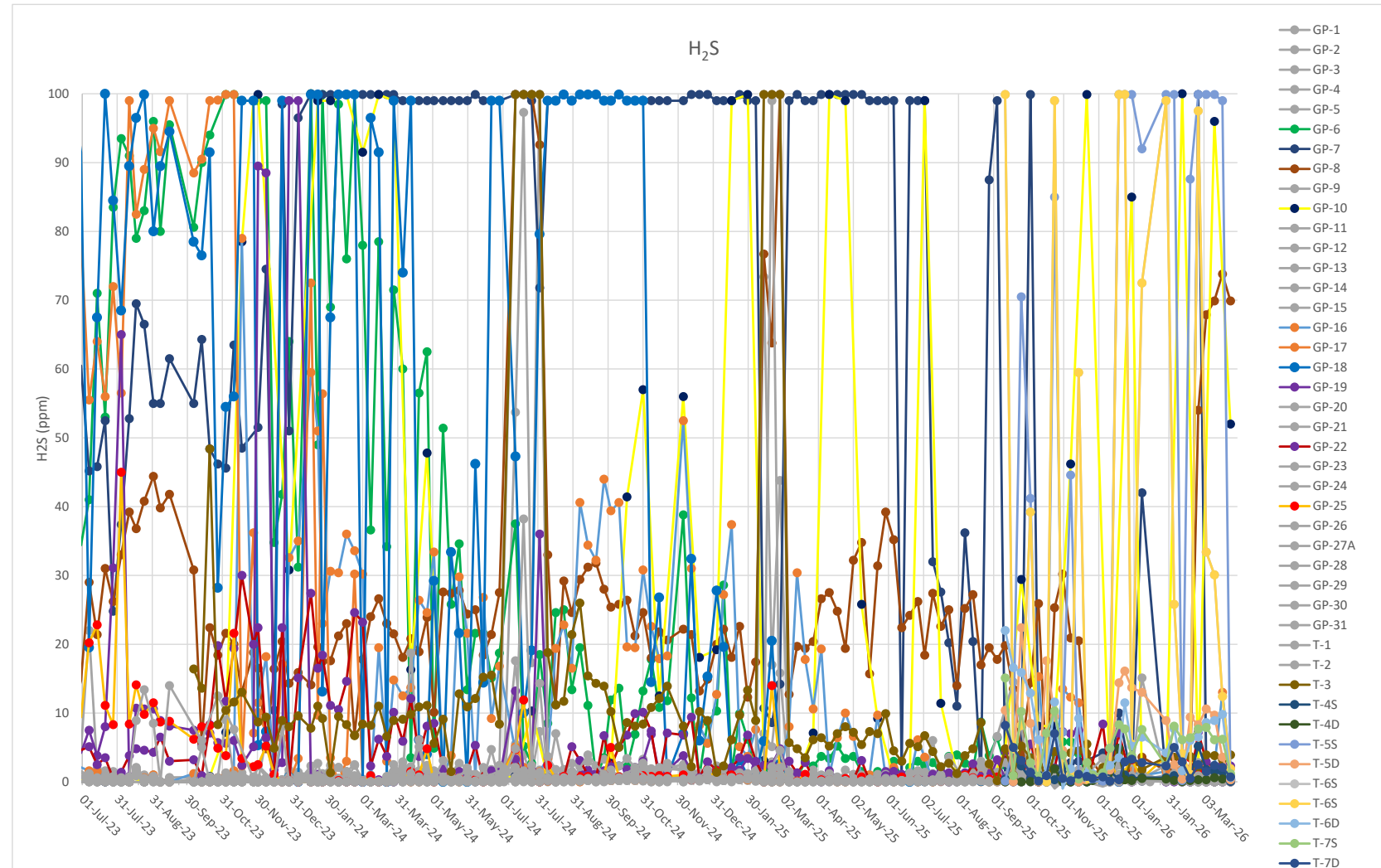
VOC emissions are often related to subsurface landfill fires. The fact that VOC emissions have declined and stayed low for the past several months are a strong indication that the fire is inactive.



# Hydrogen Sulfide

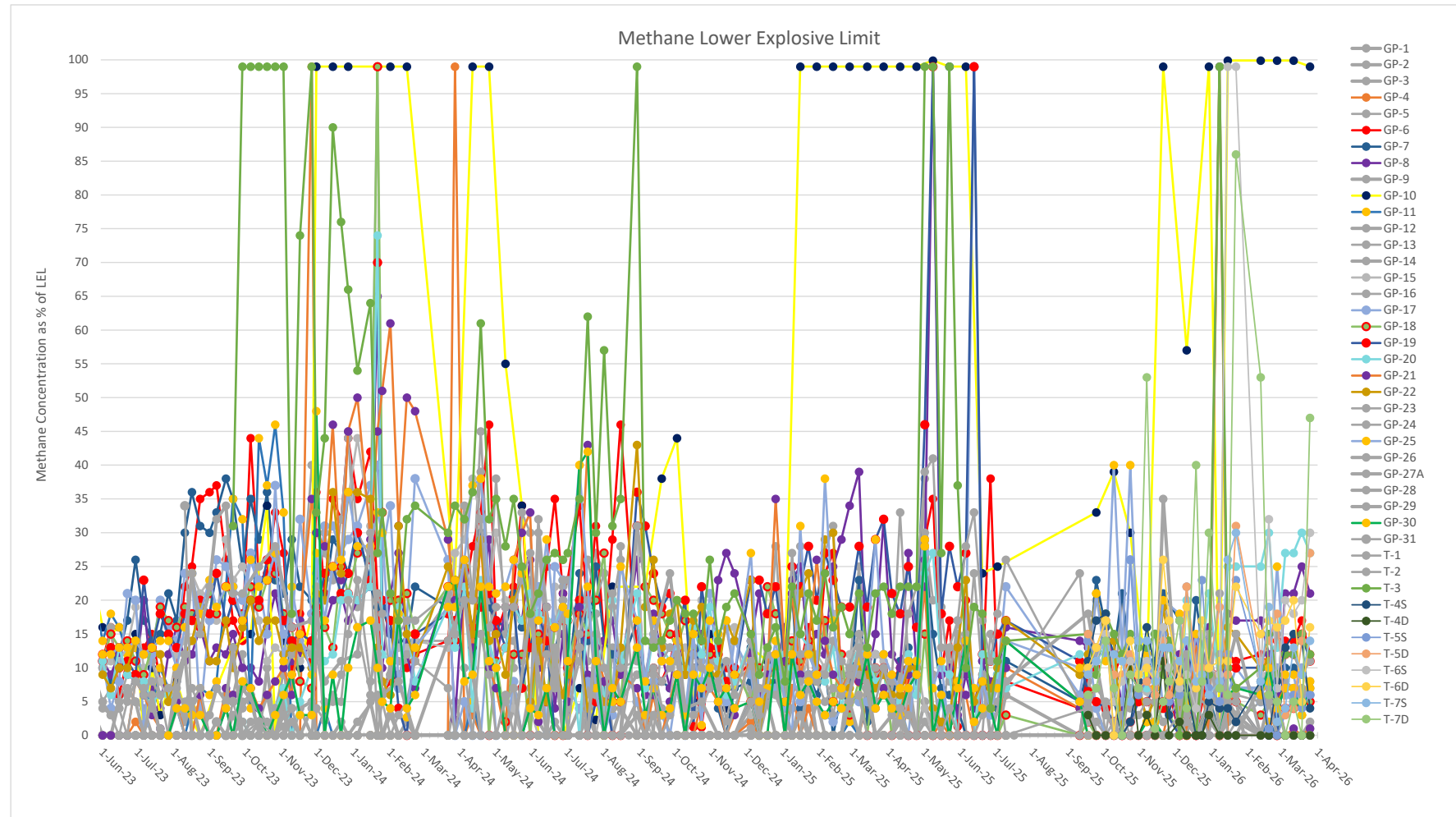
H<sub>2</sub>S data continues to be noisy, likely affected by atmospheric pressure fluctuation. Most locations are low, but some locations such as T-5S and T-6S continue to fluctuate wildly. GP-8 has increased significantly in March from close to 0 up to around 70ppm.

As mentioned previously, it is possible that the H<sub>2</sub>S sensors are being impacted by CO cross interference. This seems to be confirmed as overall CO concentrations are decreasing, and the reported H<sub>2</sub>S concentrations are dropping as well.

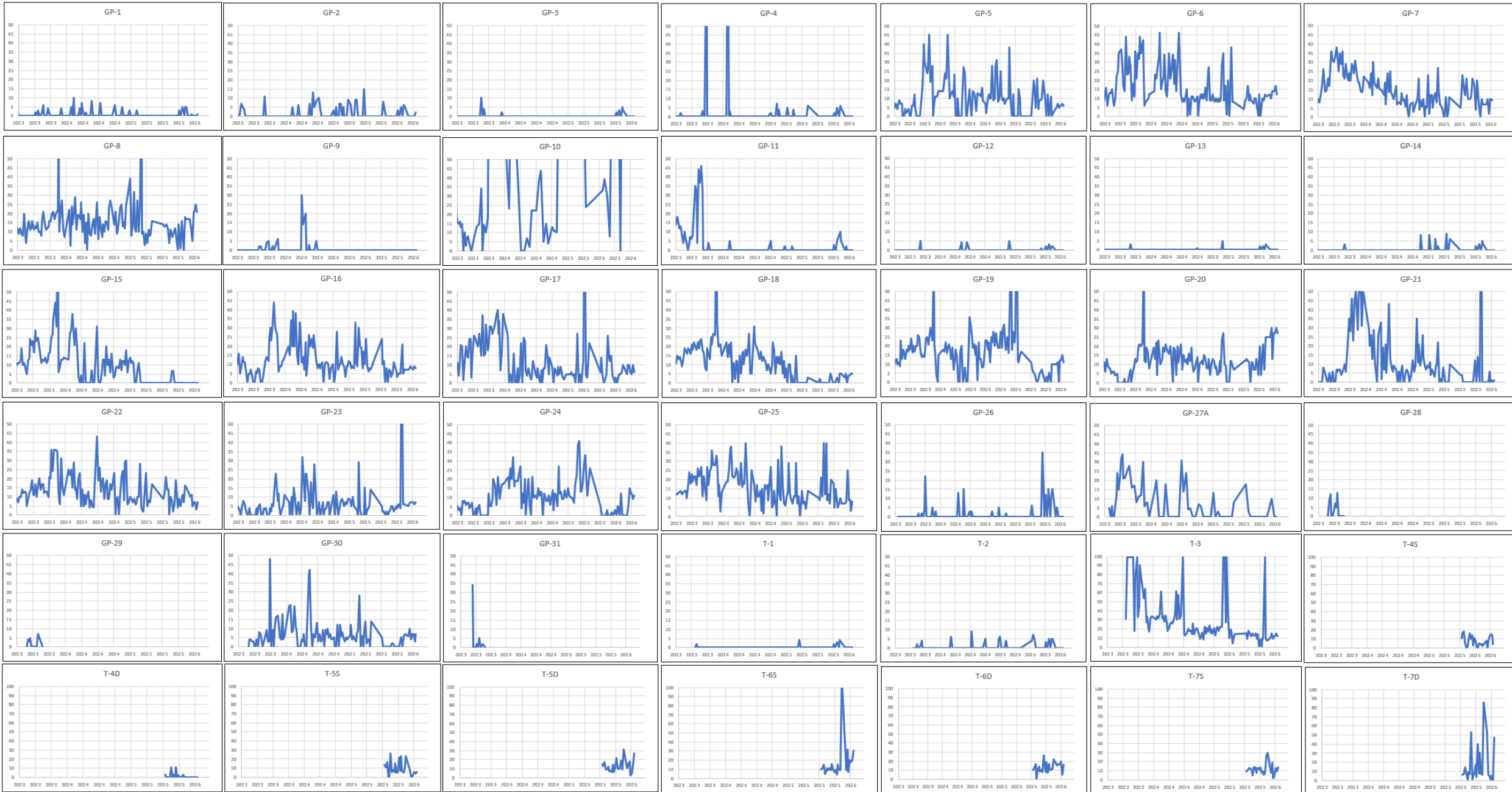


# Lower Explosive Limit

Several data points are fluctuating wildly – the direct methane composition is a better indicator of levels within the landfill. Most monitoring points are reporting below 20% of the LEL.



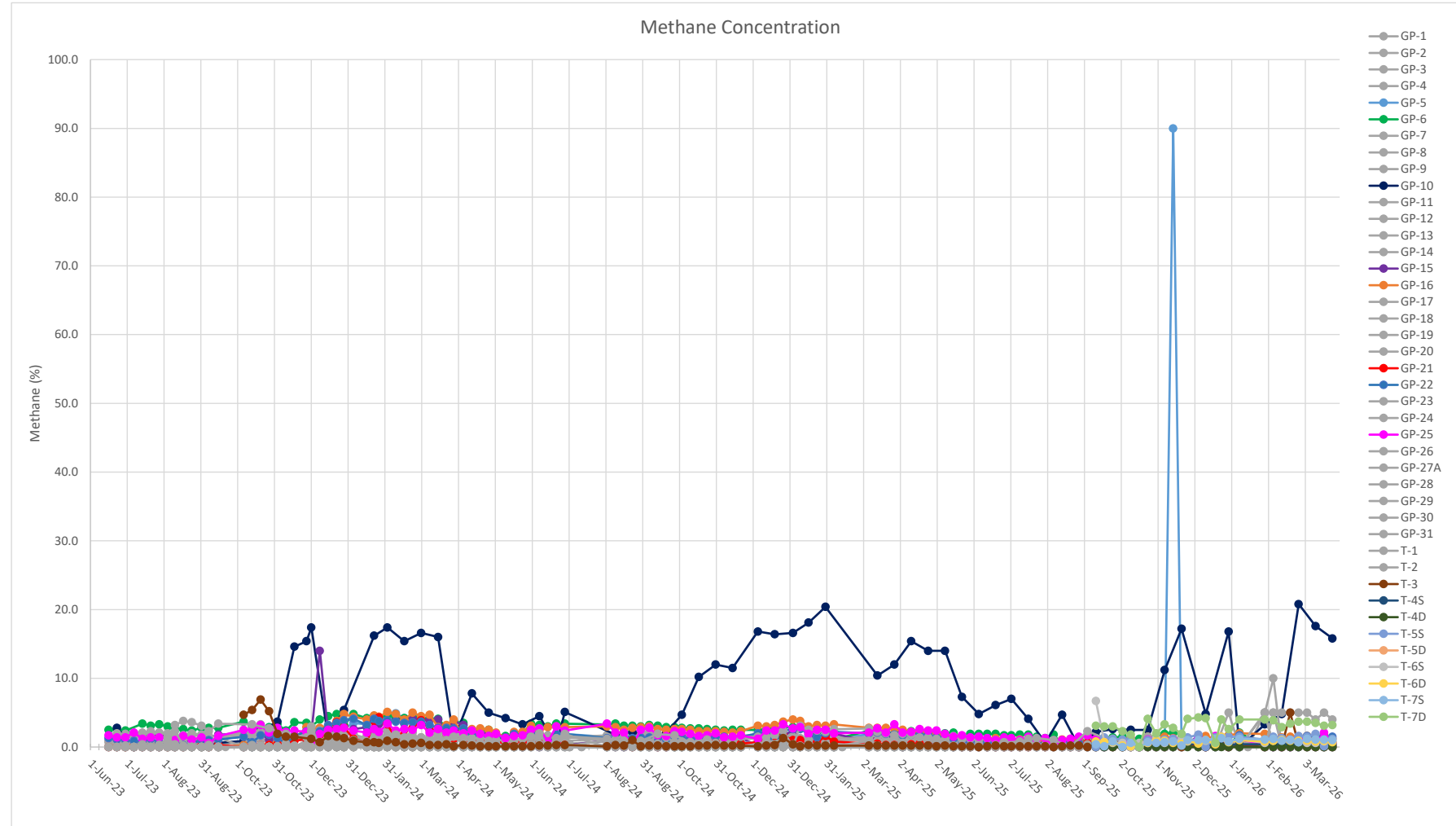
# LEL for individual GP



# Methane

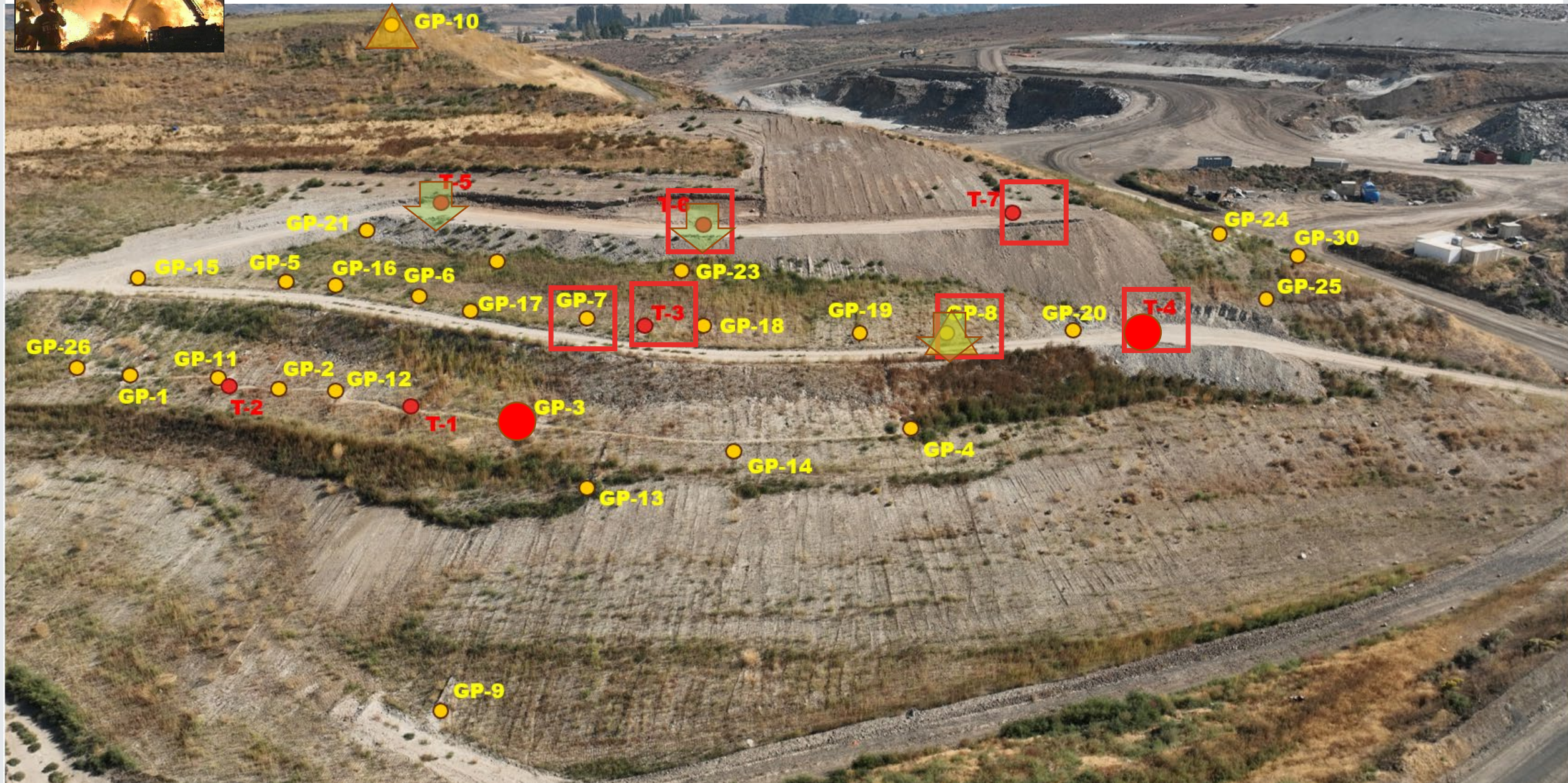
Methane levels for most wells are converging between 0 and 2.5% indicating that landfill is not biologically active. Only well GP-10 has been indicating consistently higher methane concentrations.

There appears to be a seasonal fluctuation with high methane levels occurring in Jan of each year in crest monitor GP-10. The cause is unclear, but LFCI believes this is possibly due to freezing or snow pack on the landfill surface preventing methane from escaping. This pattern is appearing again as the new year advances, and it is expected that the methane concentration in this well will fall over the next few months.

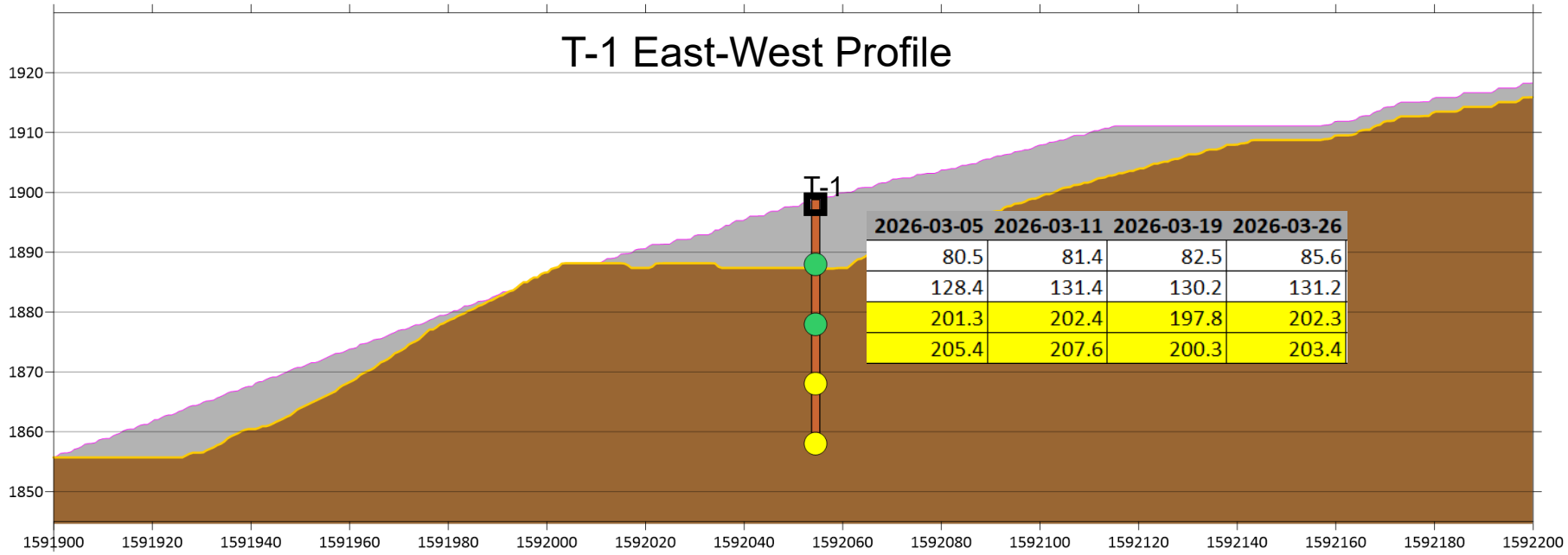




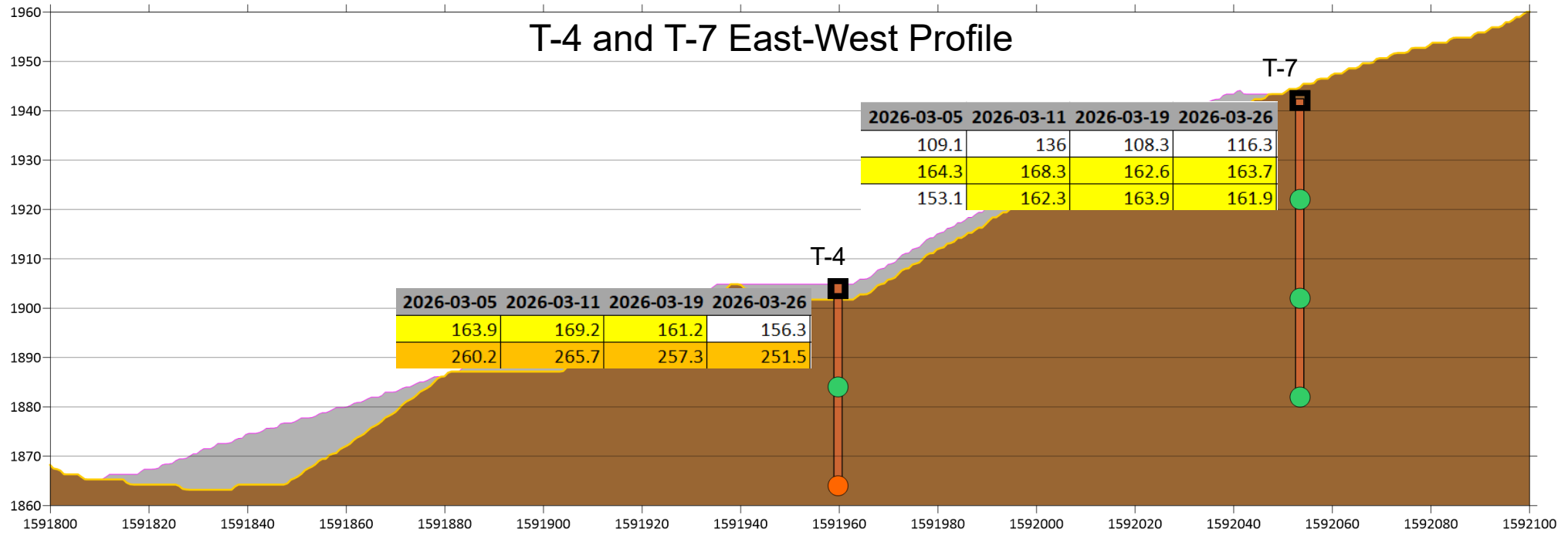
● High Temp (>200)    □ High CO    ▲ High H2S    ▼ High VOC



## T-1 East-West Profile



## T-4 and T-7 East-West Profile



# Data Interpretation

LFCI believes that suppression efforts continue to work, but slowly after the initial decrease in smolder activity. CO levels and temperatures have decreased dramatically since cover fill was placed. Temperatures initially decreased, but have levelled off to a slower cooling trend since December 2024, as have most gas concentrations. The temperature graphs indicate that the cooling is following a trend similar to a logarithmic decay model.

Temperatures have dropped significantly all around to Dec. 2024 when the trend has shifted to a steady condition, with minimal changes occurring. Through a small increase in February of 2026 temperatures have continued to slowly decrease, with some other small localized increases that return to previous levels within a few weeks.

In LFCI's experience, CO has been the best indicator of suppression at other landfill sites. CO in T-3 has risen between Jan and May 2025, and again decreased June-mid August. In March of 2026 CO has not exhibited a clear trend, but seems to hover in the highest wells (T-6) around 4000ppm. This elevated level suggests a smolder remains somewhat active downslope of this monitor, which is confirmed through the temperature monitoring.

High O2 continues to fluctuate seasonally as a result of increased soil cover permeability during summer months when ground is not frozen. The increases in O2 starting July 1, 2025 were of some concern but December has continued to see some decrease in oxygen compared to other recent months. As atmospheric pressure has been increasing, large ambient pressure swings have been noted, and the cover soil has been inspected and no major concerns found. Additional cover was recommended in area of T-4 where cover soil was excavated to make room for developing the new wells, which was completed.

LFCI believes that the waste continues to smolder underneath GP-3 and T-1 (elevated temperature) but the rate of smolder is steadily decreasing. Also, a 'chimney' effect is occurring, causing higher levels of indicator gases at T-3 and GP-8 with the latest monitoring event showing an increase in gas concentrations at GP-7 and GP-8 – it is unknown if this can be attributed to venting from the T-4 or the GP-3 area. Of greatest concern at this time is the sign of active smolder developing around T-4, and as elevated CO and temperature continue in this area, additional suppression measures became necessary in that area and have been carried out. Since then CO and temperatures in the area have been on a slow decreasing trend.