August 14, 2025

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 – July

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 July 2025 to implement the requirements of this AO.

Activities:

On-site activities included weekly gas probe and every other week ambient monitoring. The once per month regulatory review meeting was held on July 24, 2025. The monitoring data summary through July 2025 from Landfill Fire Control, Inc. (LFCI) is attached.

The Q2 groundwater report was drafted for submitted in August.

The Q2 MTCA technical memorandum was drafted for submittal in August.

Gregory Drilling completed the drilling of MW-1S.

Gregory Drilling began installation of the new thermistors.

Deviations from Plans (if any):
The LFCI July summary identifies concern for increased oxygen levels in the fill. This may be due to the thermistor installations and cut road access. Thermistor installation will be completed in August and the cut road will be backfilled.

Deviations Description from the Scope of Work and Schedule:
Drilling has been progressing slower than plan.

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
- July Progress Report
- Q2 groundwater report
- Q2 MTCA TM
- Well development of MW-11S
- Completion of thermistors

Please contact me to discuss any of the above items.

Respectfully,

Ian Sutton
Director of Engineering
DTG Recycle
isutton@dtgrecycle.com

Enclosures: LFCI Data Update – July 2025

cc: mbrady@parametrix.com
steven.newchurch@co.yakima.wa.us

August 11th, 2025 LFCIPRJ-2023-001

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

By email: isutton@dtgrecycle.com

Re: Monthly Data Assessment Report DTG Yakima Landfill Fire Incident – July 2025

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 July has exhibited a flattening of the response on account of a substantive air incursion event that started on July 1, 2025. Overall, CO and temperatures continue to trend downward, particularly in GP-3, the hottest probe. Thermistor response in T-1 has also been one of levelling off with modest reheating on account of the recent air incursion.

When looking at long term trends, the collected data has indicated that the subsurface smolder has become much less active since the soil cover was applied. Temperature and other parameters have all indicated a decrease in fire activity, with CO once again low and decreasing.

A concern has been recognized with oxygen levels increasing throughout the month to highest levels observed to date in many wells (see spatial maps of O2). As there has been no large scale pressure swings to have triggered such a response in July, 2025 LFCI is concerned that cover integrity may have been impacted by desiccation cracking and/or settlement induced stress cracking. LFCI recommends that the cover integrity be inspected for signs of cracks.

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 currently 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, 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 time line now projected to extinguishment, LFCI is of the 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.

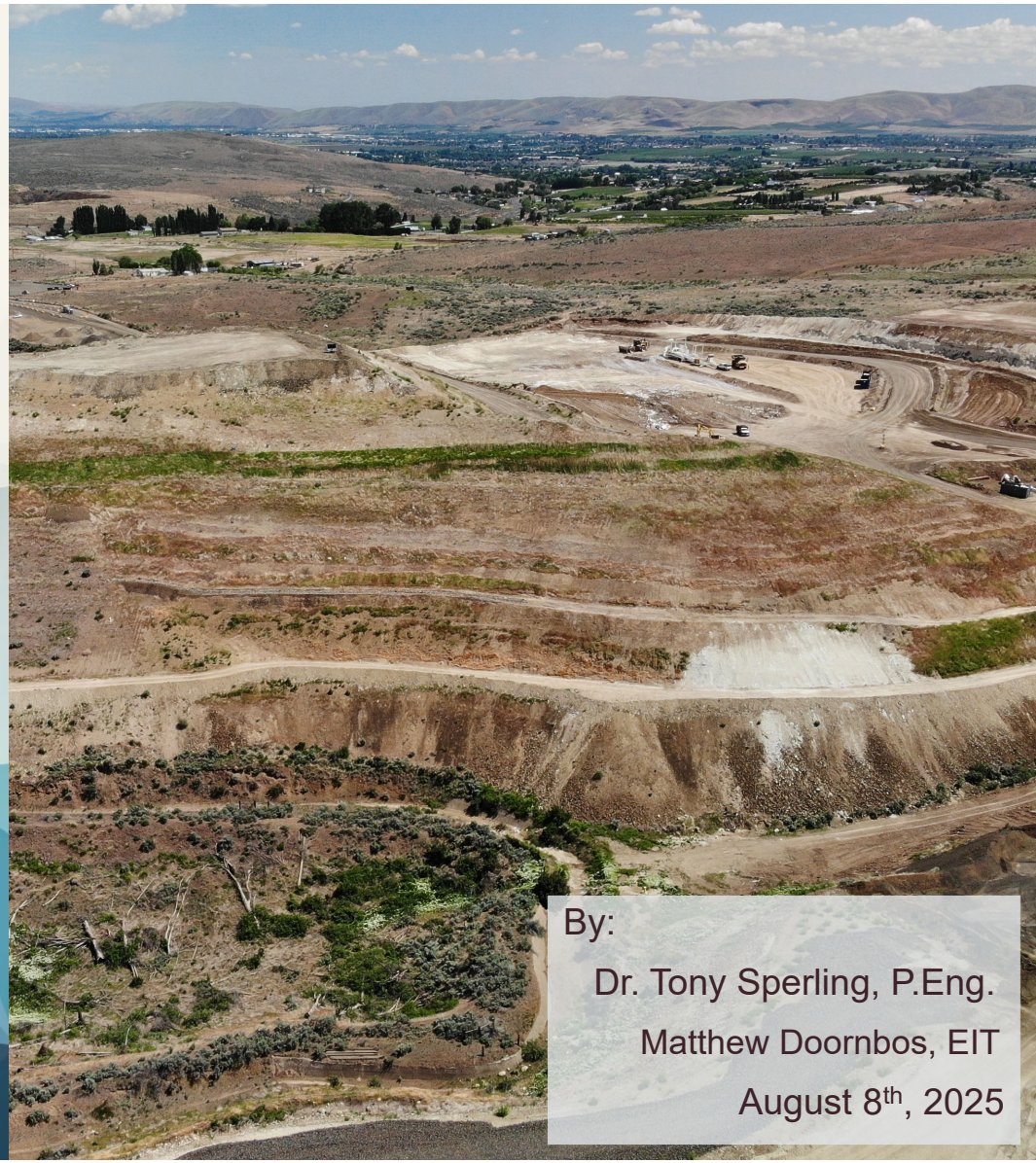
Dr. Tony Sperling, P.Eng.
President

August 11th, 2025

DTG LPL LANDFILL FIRE INVESTIGATIONS AND MITIGATION

Monthly Monitoring Data Review

July 2025



By:

Dr. Tony Sperling, P.Eng.

Matthew Doornbos, EIT

August 8th, 2025

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LANDFILLFIRE.com
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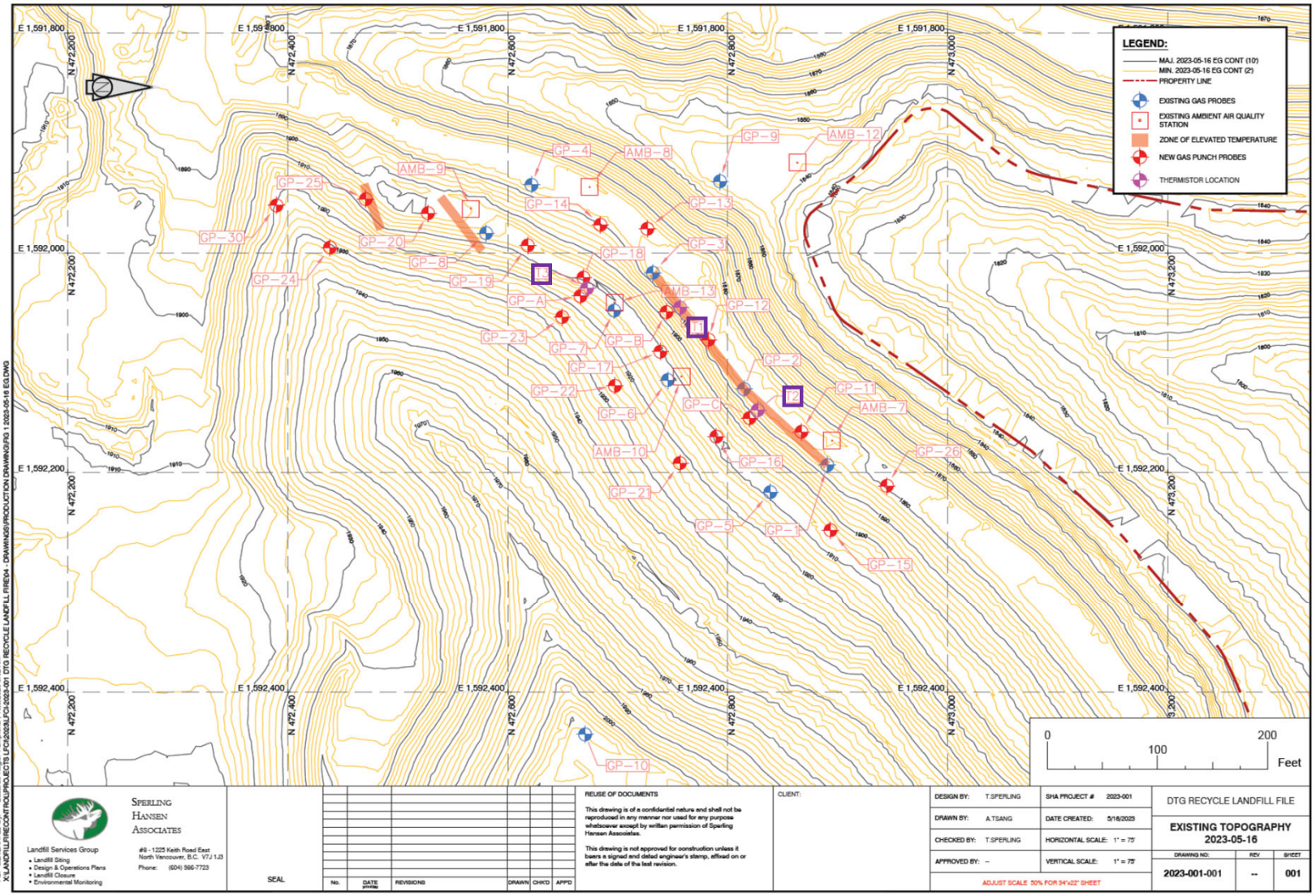

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SPERLING HANSEN ASSOCIATES

Landfill Services Group
- Landfill Siting
- Design & Operations Plans
- Landfill Closure
- Environmental Monitoring

#8 - 1225 Keith Road East
North Vancouver, B.C. V7J 1J3
Phone: (604) 986-7723

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No.	DATE plotted	REVISIONS	DRAWN	CHKD	APP'D

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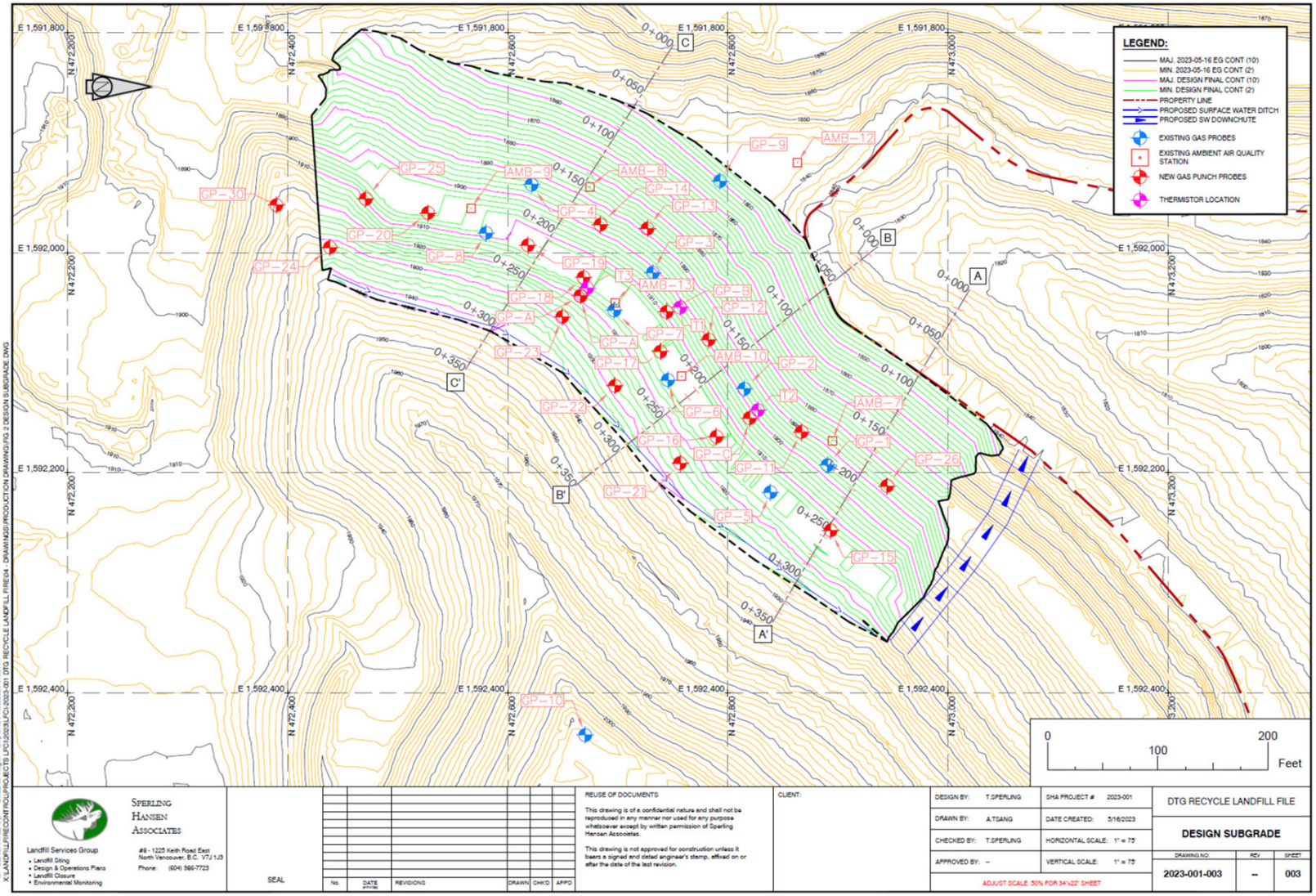
DESIGN BY:	T.SPERLING	SHA PROJECT #	2023-001
DRAWN BY:	A.TSANG	DATE CREATED:	5/16/2023
CHECKED BY:	T.SPERLING	HORIZONTAL SCALE:	1" = 75'
APPROVED BY:	--	VERTICAL SCALE:	1" = 75'

ADJUST SCALE 30% FOR 34"x22" SHEET

DTG RECYCLE LANDFILL FILE

EXISTING TOPOGRAPHY 2023-05-16

DRAWING NO:	REV	SHEET
2023-001-001	--	001



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ADJUST SCALE 50% FOR 34"x22" SHEET

DTG RECYCLE LANDFILL FILE

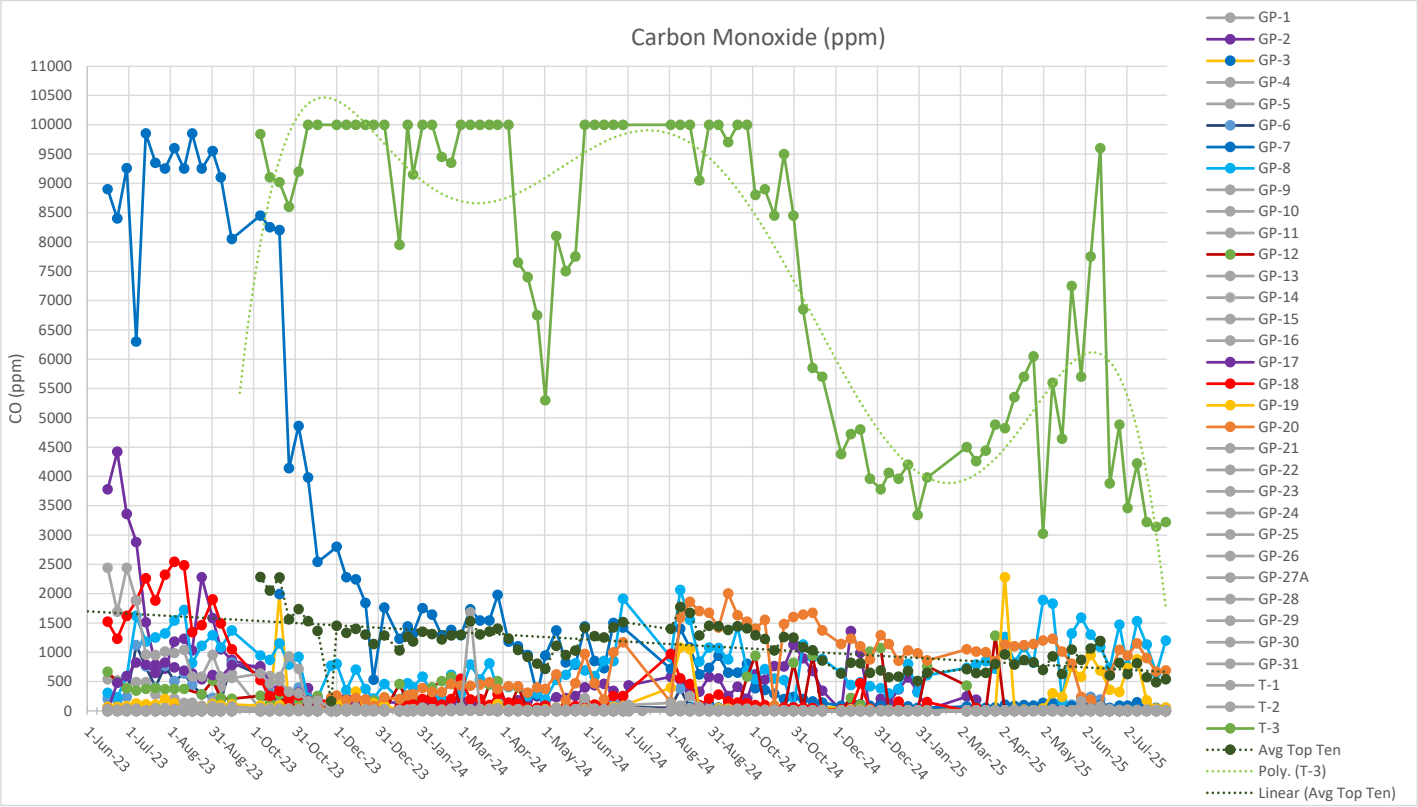
DESIGN SUBGRADE

DRAWING NO:	REV	SHEET
2023-001-003	--	003

Carbon Monoxide

The month of July saw positive Carbon Monoxide trends, with levels maintained around 3500ppm in the T-3, the highest measuring well.

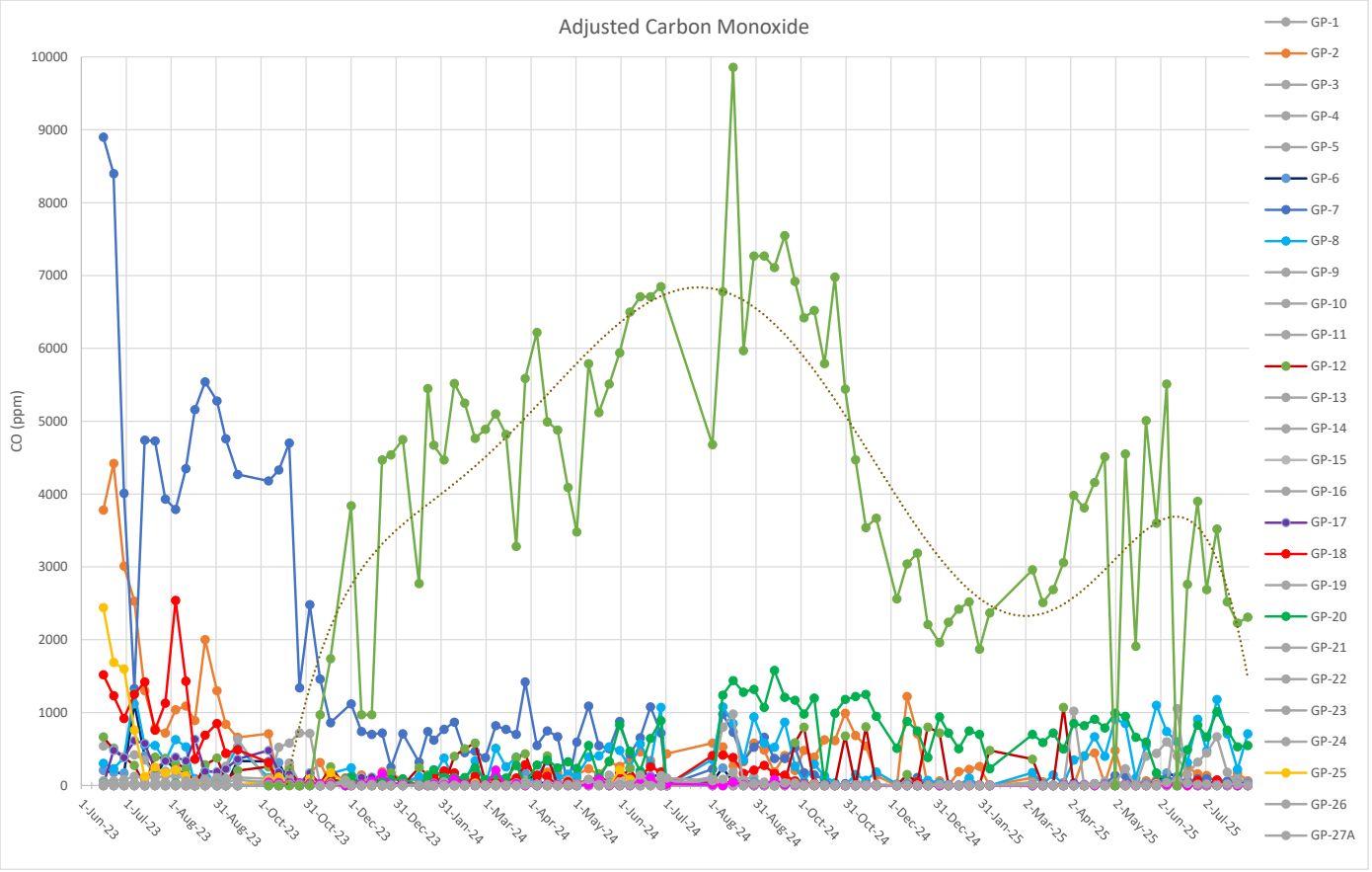
The average CO across the top 10 wells has been decreasing steadily since soil application commenced, with a slight increase since January 2025, correlating with increased pressure oscillations that push more atmospheric air into the landfill. This slight increase has now returned to declining trends.



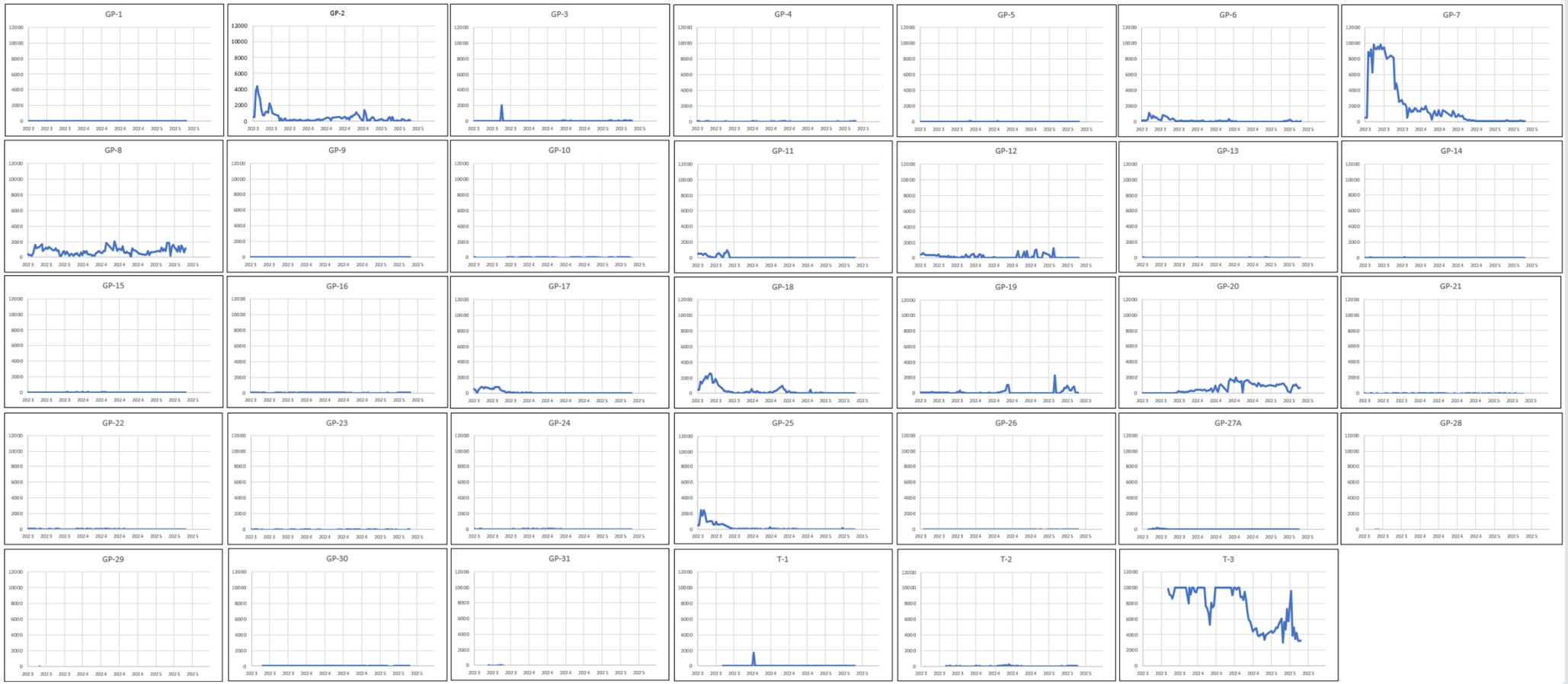
CO Adjusted for H2 Gas

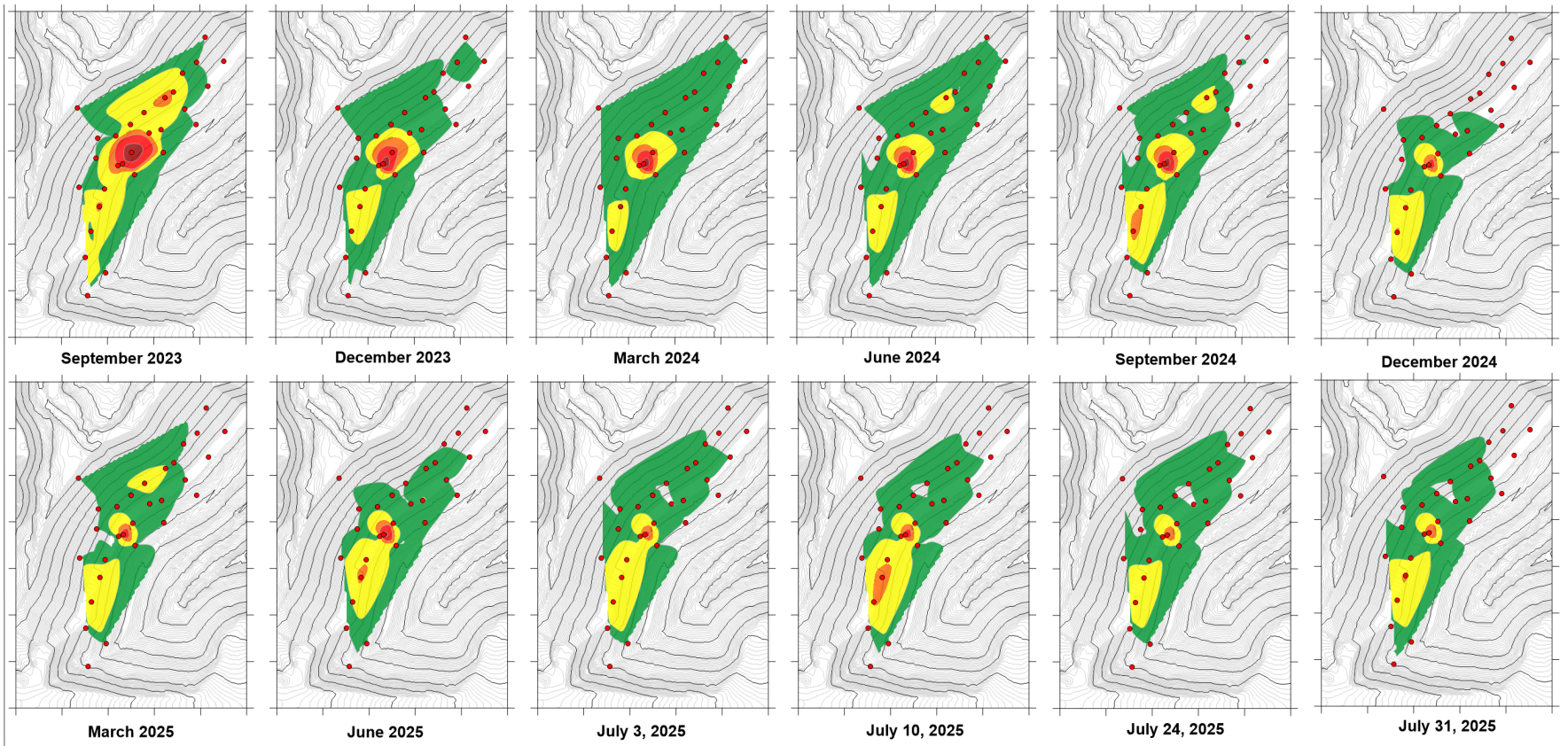
Adjusted CO measurements have also shown somewhat increased but varying levels of carbon monoxide between January, 2025 and early June, 2025.

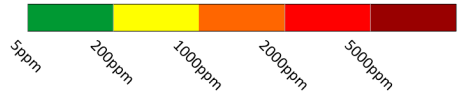
The previously observed increase trend through early 2025 has now returned to a decreasing trend, with adjusted values falling to approximately 2500ppm when adjusted for possible hydrogen interference.



CO Levels by Individual Wells







- Data taken from first monitoring event of each month unless noted otherwise
- Data has been interpolated between data points
- Datapoints (probe locations) represented in red
- CO levels are measured in ppm
- Ground contours are of existing ground at beginning of project, with design contours added for after addition of fill

LANDFILLFIRE.com

No.	DATE yr/m/day	REVISIONS	DRAWN	CHK'D	APP'D

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DESIGN BY:	T. SPERLING
DRAWN BY:	M. DOORNBOS
DATE CREATED:	2025/08/07
SHA PROJECT #	LFCI-2023-001

DTG RECYCLE LANDFILL FIRE

MONTHLY MONITORING SUMMARY SPATIAL MAPS - CO

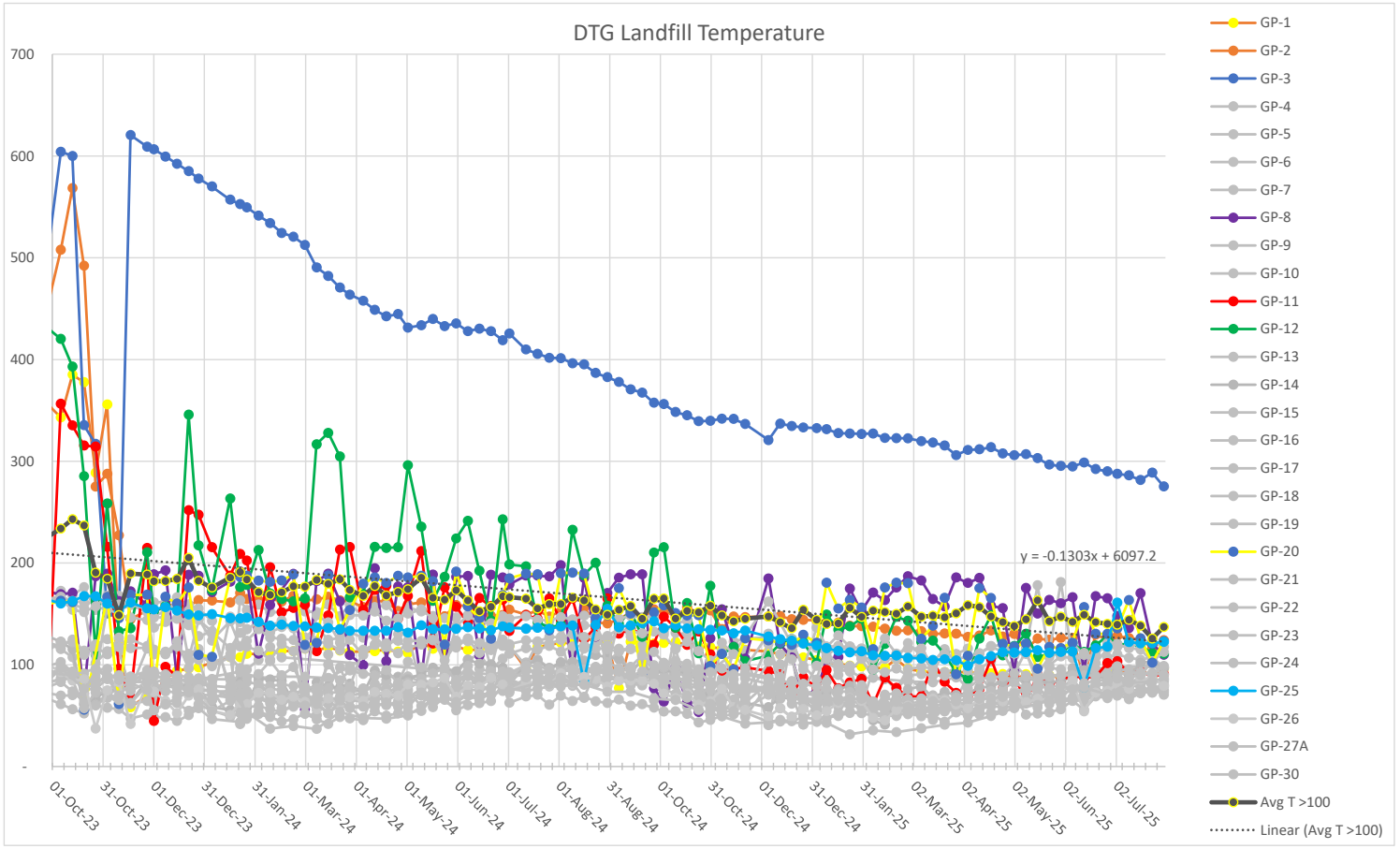
DRAWING NO.	REV	SHEET
LFCI-2023-001-07-CO	1	1

Temperature (F)

July saw continued decreasing temperatures in GP-3, the hottest well, with temperatures continuing to fall below 300F, and the last event in July having a recorded temperature of 275F.

Similar to June, the trend line continues to show gradual cooling, with the wells reading above 100F showing some variation but seeming to be generally stable over the past month.

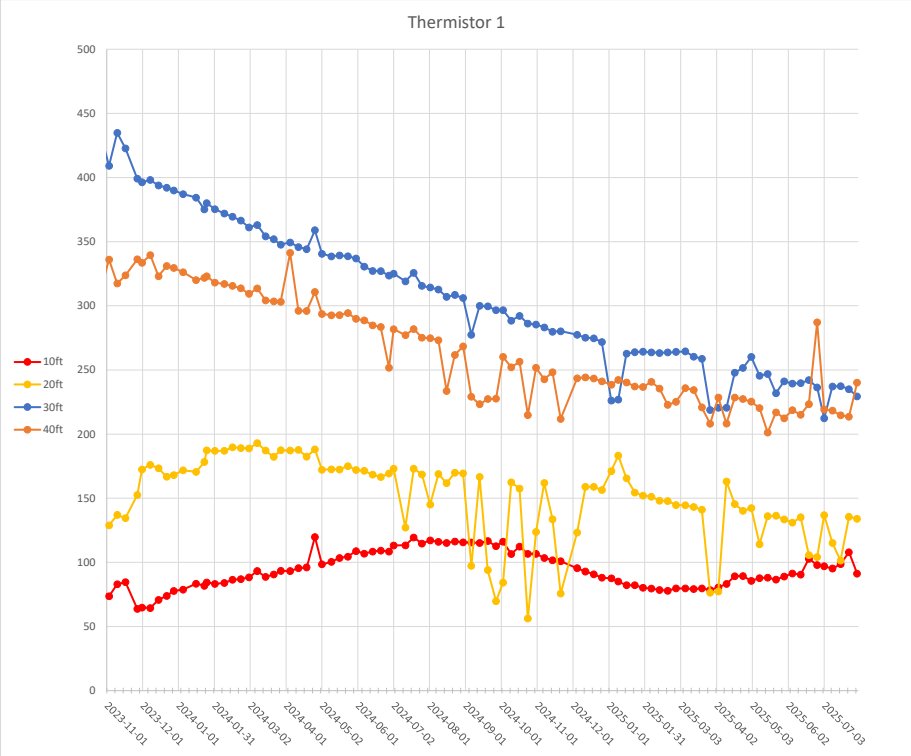
Note the seasonal warming that can be seen in the lowest temperature wells, exhibiting slightly higher temperatures during the summer months.

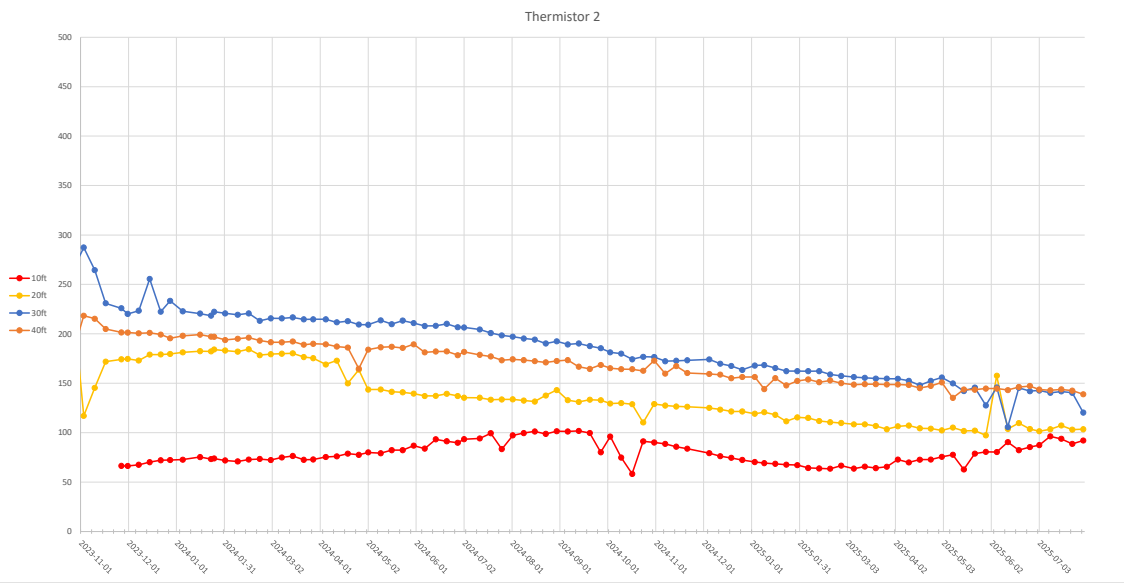


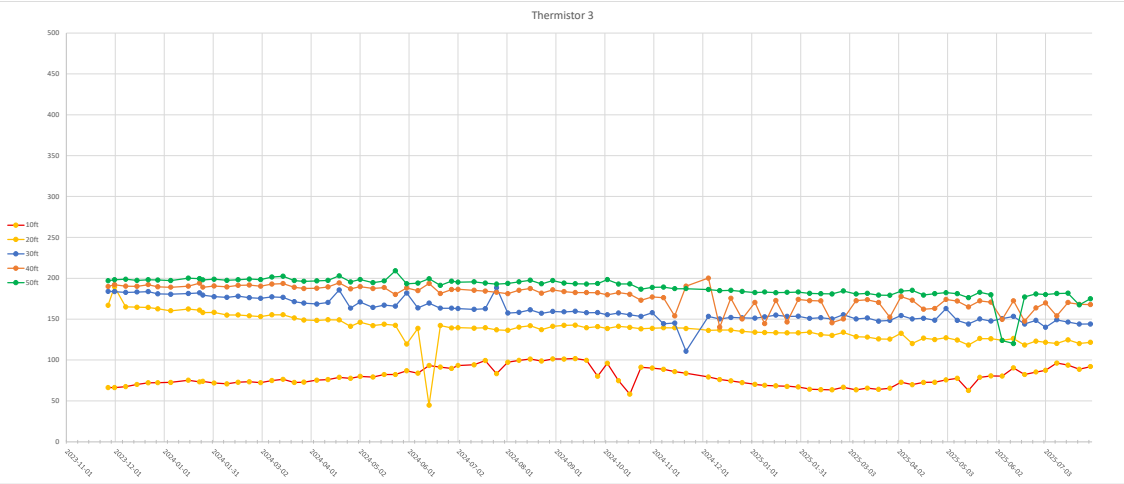
Thermistor Temperatures

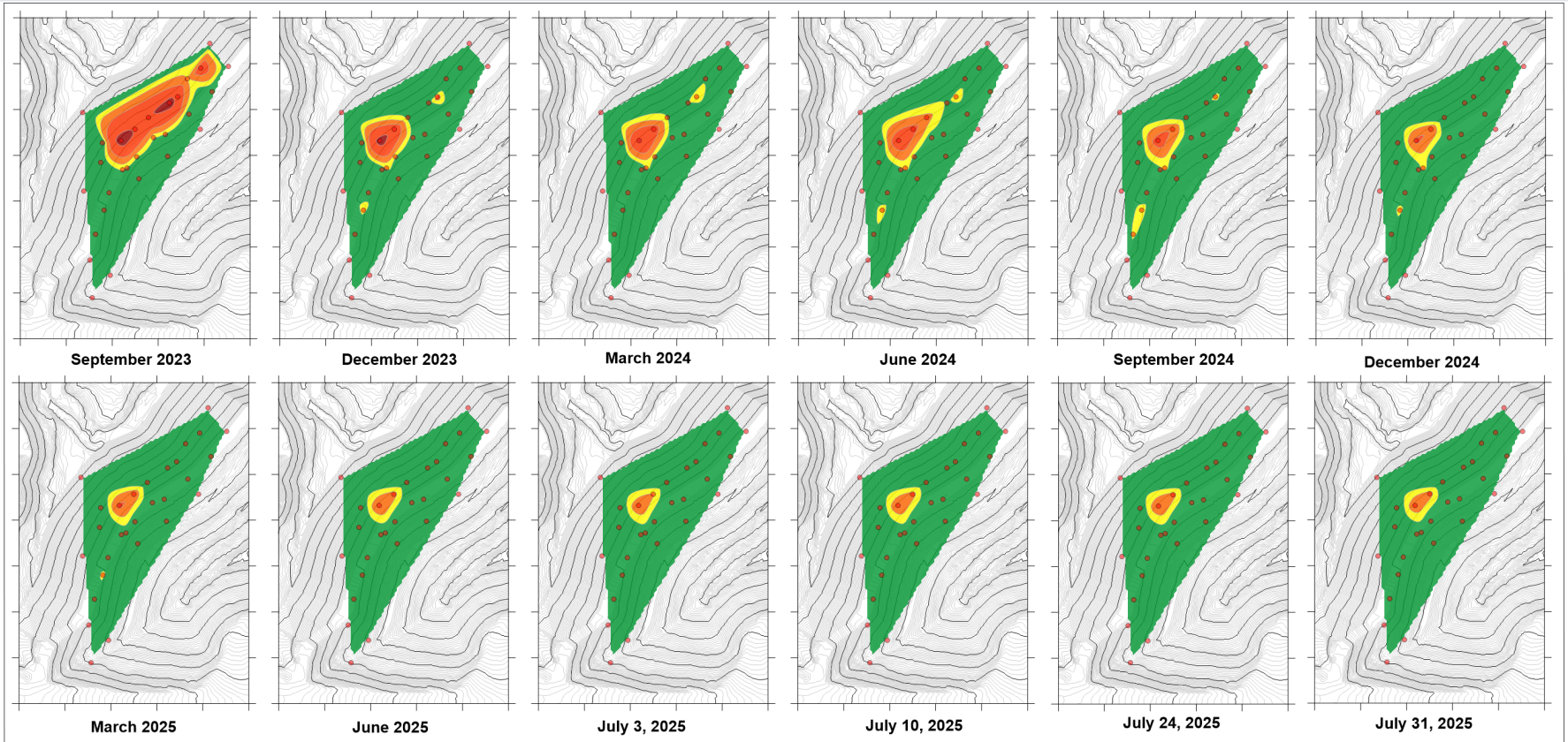
Thermistor temperatures are mostly stable, with a slight downward trend in T-1, T-2 and T-3, however; the rate of cooling is decreasing, especially in T-1. Consideration should be given to installing a dedicated thermistor on T-1 at 20 ft, as the oscillations seen at depths of 20 and 30ft feet indicate there may be issues with the measurements.

The rapid spike up outlier data point for the 40ft depth in T-1 is noted, and SHA is not concerned as temperatures have returned to previous levels.









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- Ground contours are of existing ground at beginning of project, with design contours added for after addition of fill

No.	DATE yr/m/day	REVISIONS	DRAWN	CHK'D	APP'D

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DRAWN BY:	M. DOORNBOS
DATE CREATED:	2025/08/07
SHA PROJECT #	LFCI-2023-001

DTG RECYCLE LANDFILL FIRE

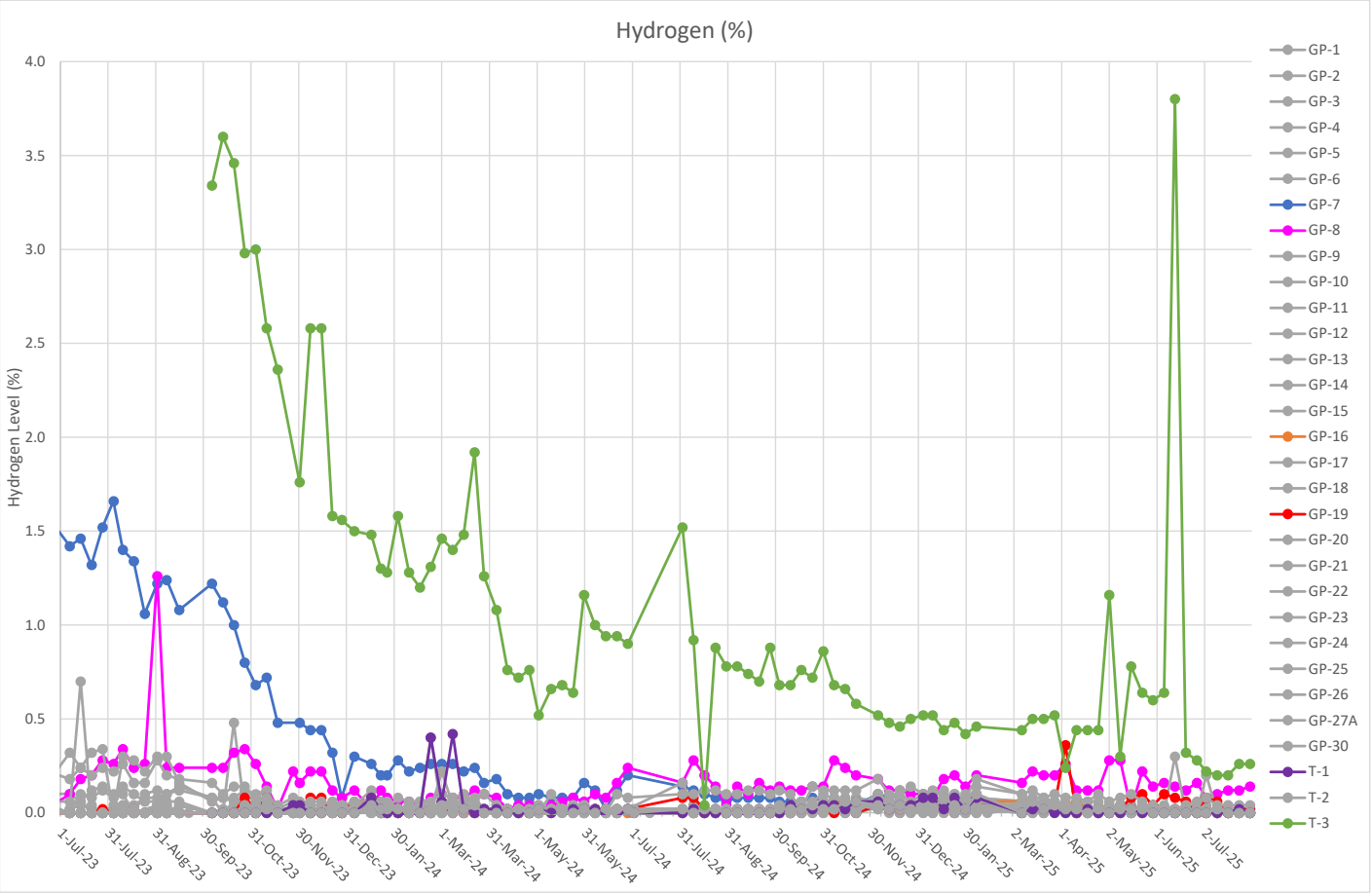
MONTHLY MONITORING SUMMARY
SPATIAL MAPS - TEMPERATURE

DRAWING NO.	REV	SHEET
LFCI-2023-001-07-TEMP	1	1

Hydrogen

The hydrogen measurements in T-3 have continued at an all-time low, around 0.25%.

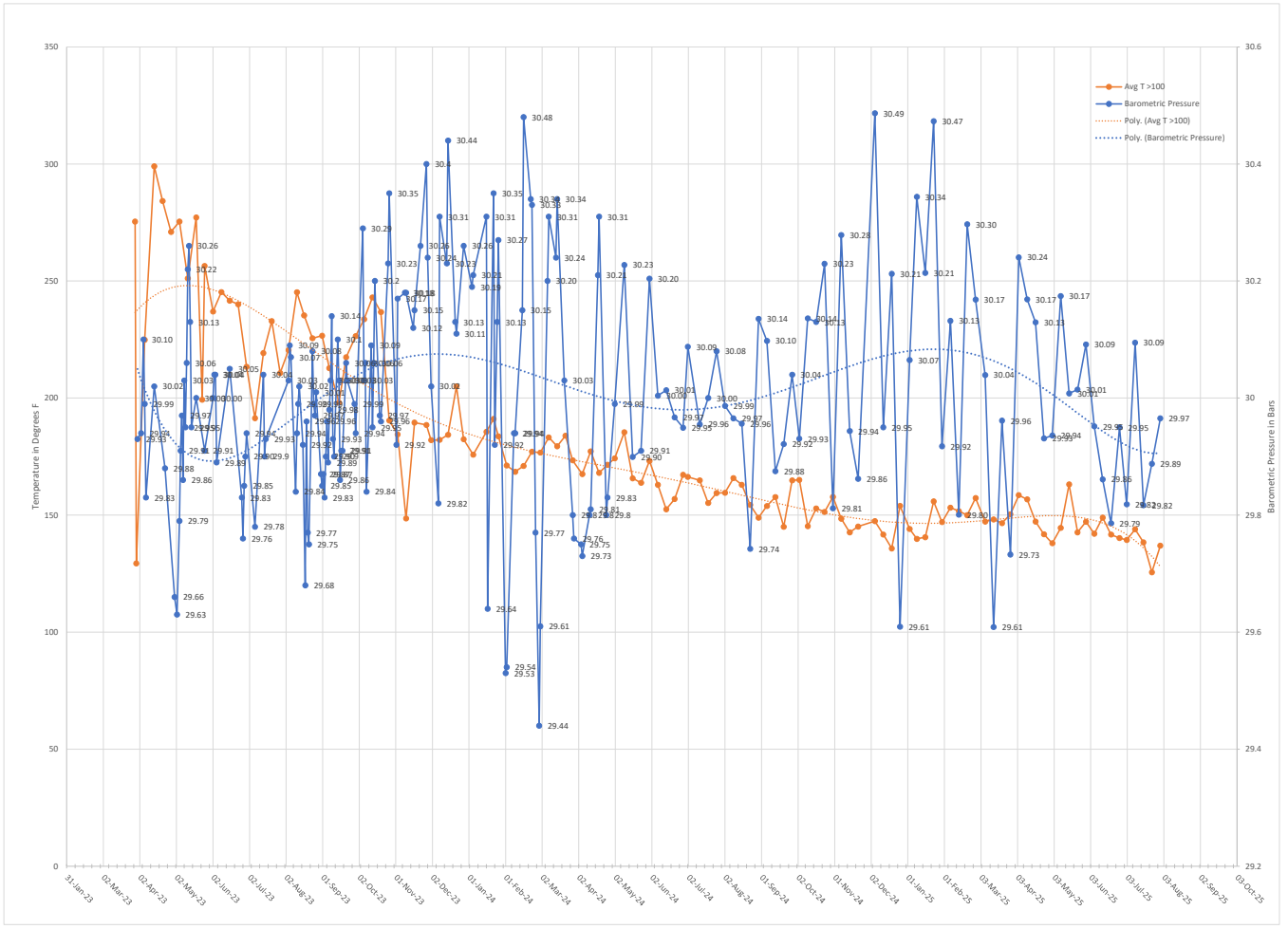
Hydrogen remains very low in all other wells. Production of H_2 is often observed with smoldering waste. LFCI believes that the level of H_2 dropping continues to indicate that the fire is less active.



Barometric Pressure

The site continues to see a decreasing atmospheric pressure over the summer, and it is expected that the trend will turn upwards in the coming months.

Based on past pressure trends, we anticipated this low pressure environment from April through to September, which resulted in the expected less oxygen availability. This has seemingly had the desired effect of providing less oxygen to fuel the fire, as temperatures have continued to decrease.



Oxygen

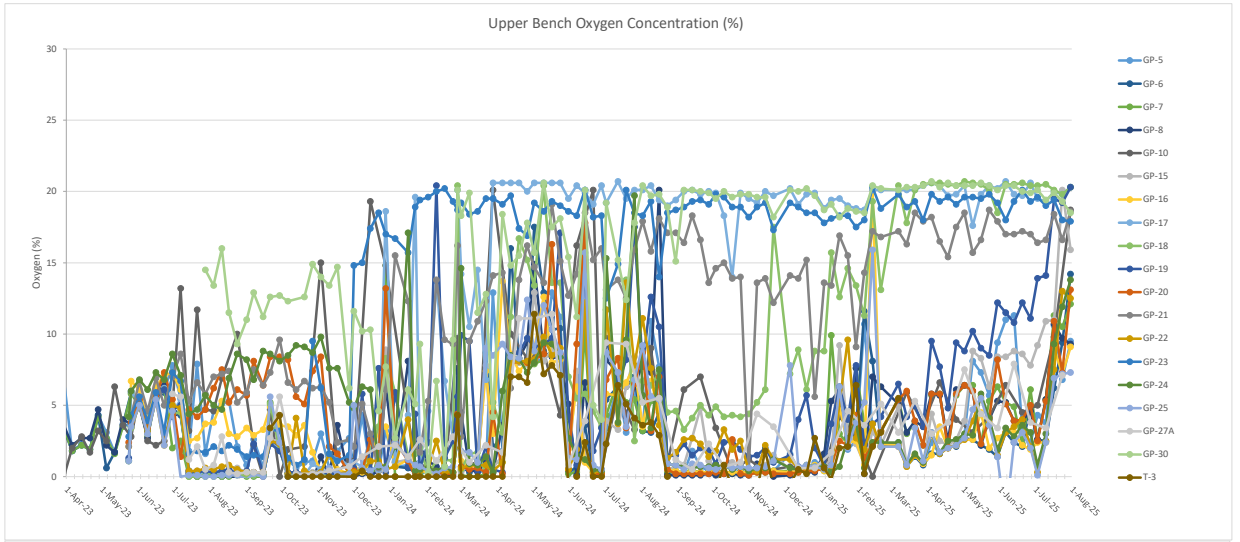
The oldest portion of the landfill is likely relatively inert and biologically inactive, producing very little methane. As a result, the pore space is full of atmospheric air, leading to the generally high oxygen concentrations. In plan view, oxygen levels have been increasing since January of 2025.

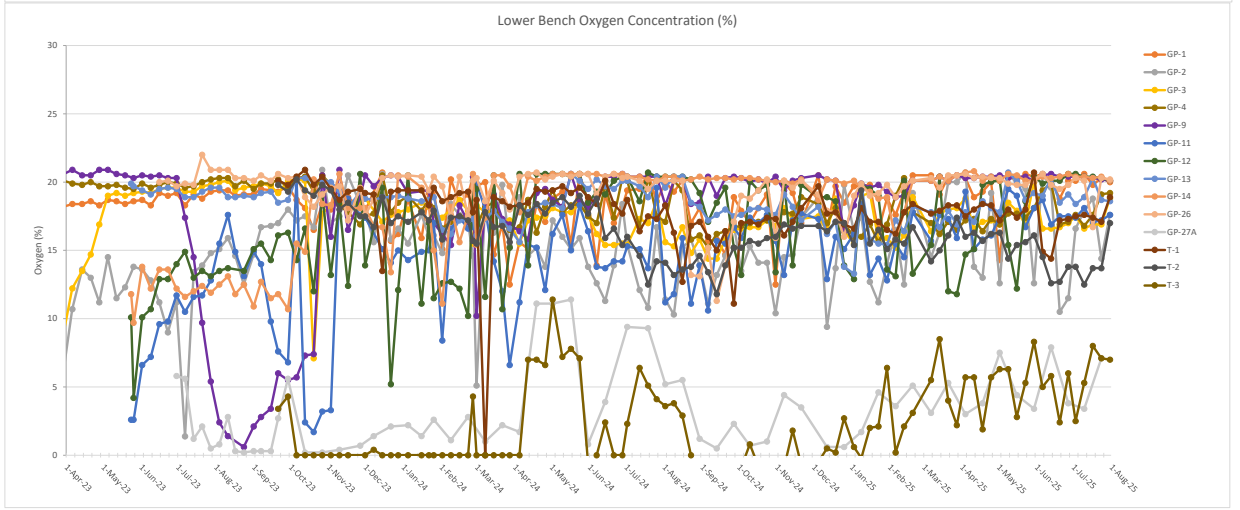
Some GPs are likely susceptible to swings in pressure – LFCI believes this is causing the spikes.

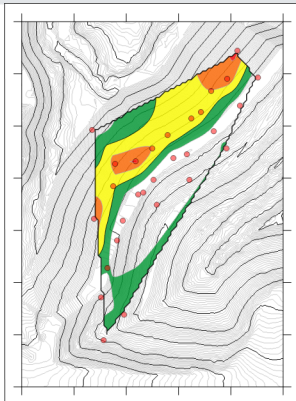
An incursion of atmospheric air has been detected in upper bench oxygen concentrations starting July 1, 2025. Areas that were consistently green (<10% O2) have changed to yellow (<15% O2) or orange (<20% O2). Such a trend has been detected previously starting April, 1, 2024. Both events were preceded by very large fluctuations in atmospheric pressure of up to 1 Bar.

April, 2024 triggered a smoulder resurgence based on CO, as did Jan 1, 2025 O2 increase. July 1, 2025 increase may trigger increase in smoulder activity.

Surface should be checked for settlement and dessication cracks that could be allowing more air entry.







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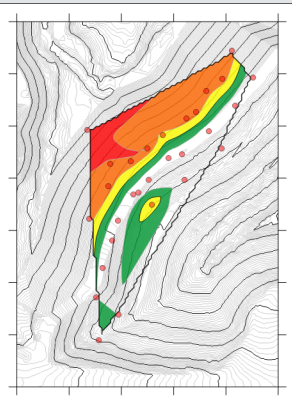

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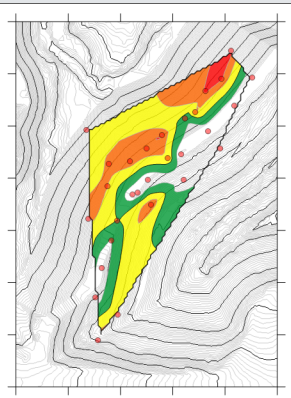

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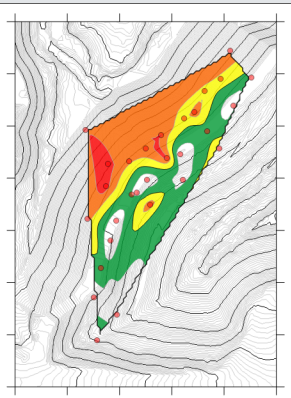

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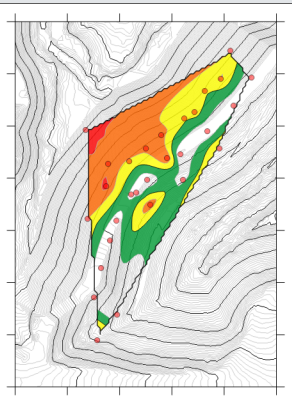

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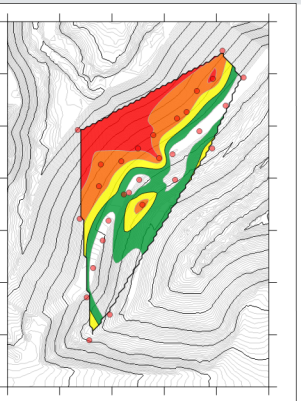

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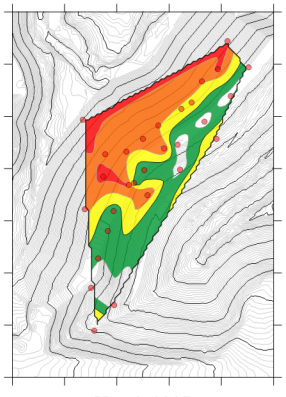

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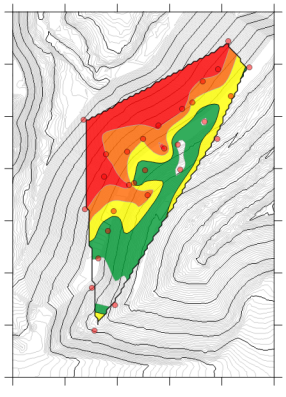

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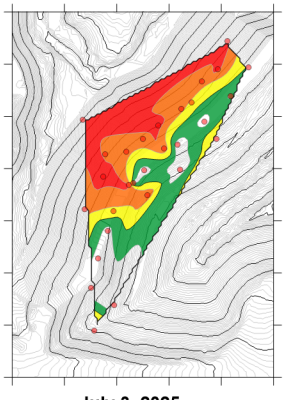

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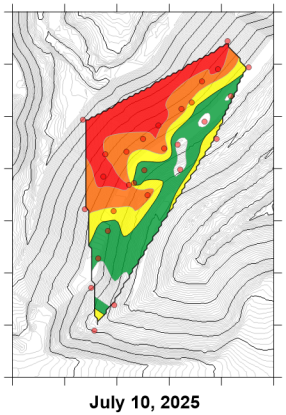

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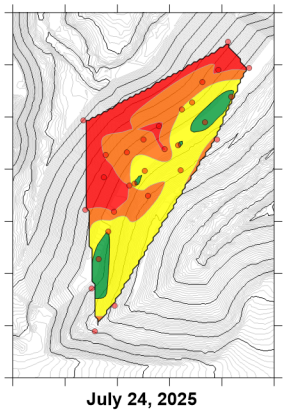
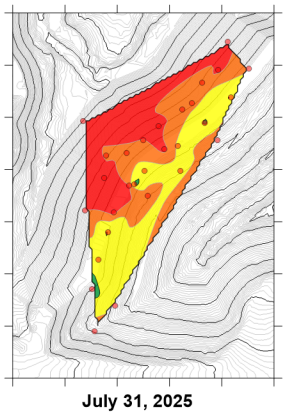


July 24, 2025



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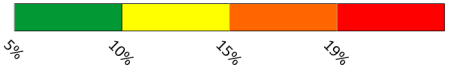

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DTG Recycle

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DRAWN BY:	M. DOORNBOS
DATE CREATED:	2025/08/07
SHA PROJECT #	LFCI-2023-001

DTG RECYCLE LANDFILL FIRE

MONTHLY MONITORING SUMMARY SPATIAL MAPS - O2

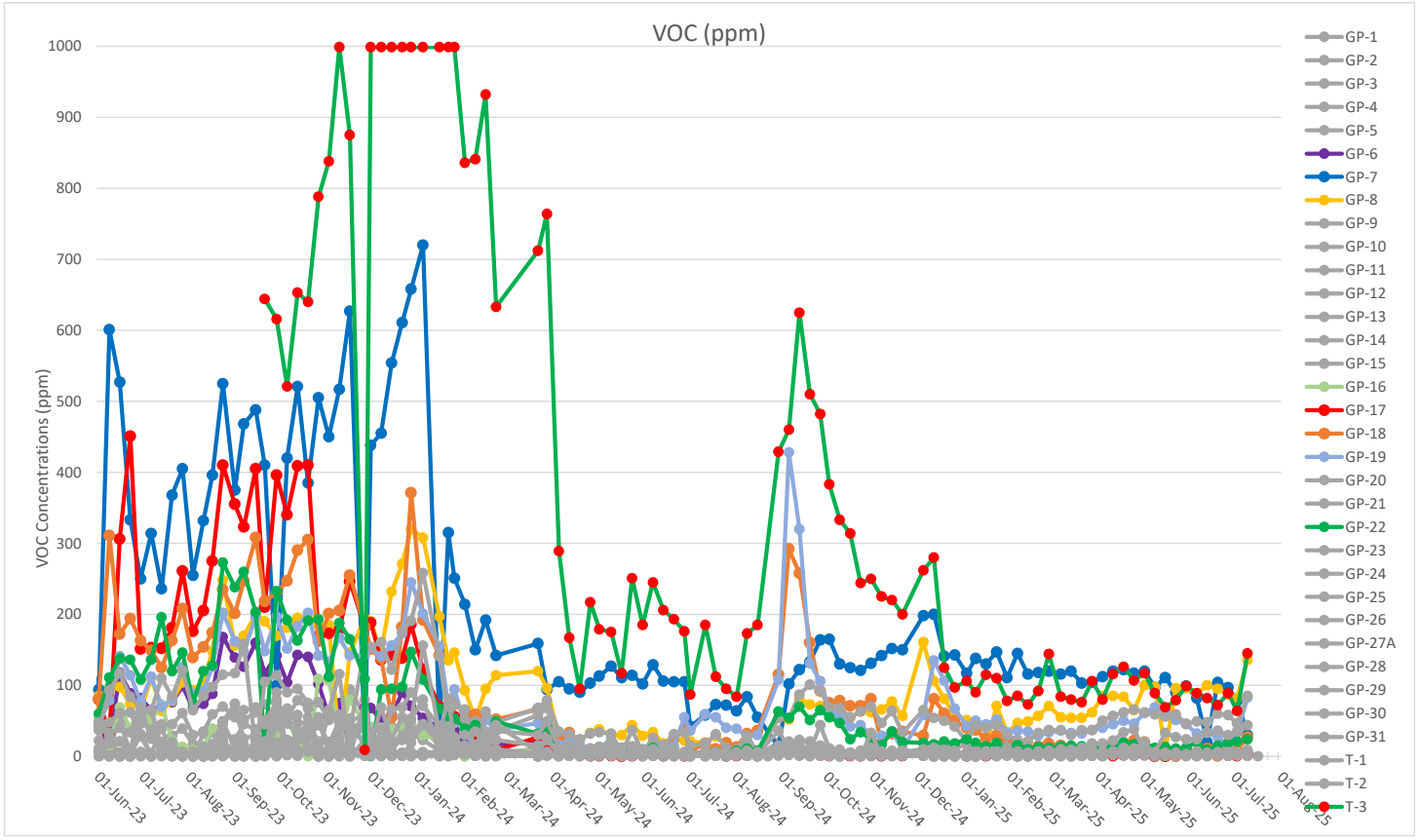
DRAWING NO.	REV	SHEET
LFCI-2023-001-07-O2	1	1

Volatile Organic Compounds

Through June and the first monitoring event of July, VOC levels have continued a modest declining trend with the highest concentrations in several wells around 100ppm.

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.

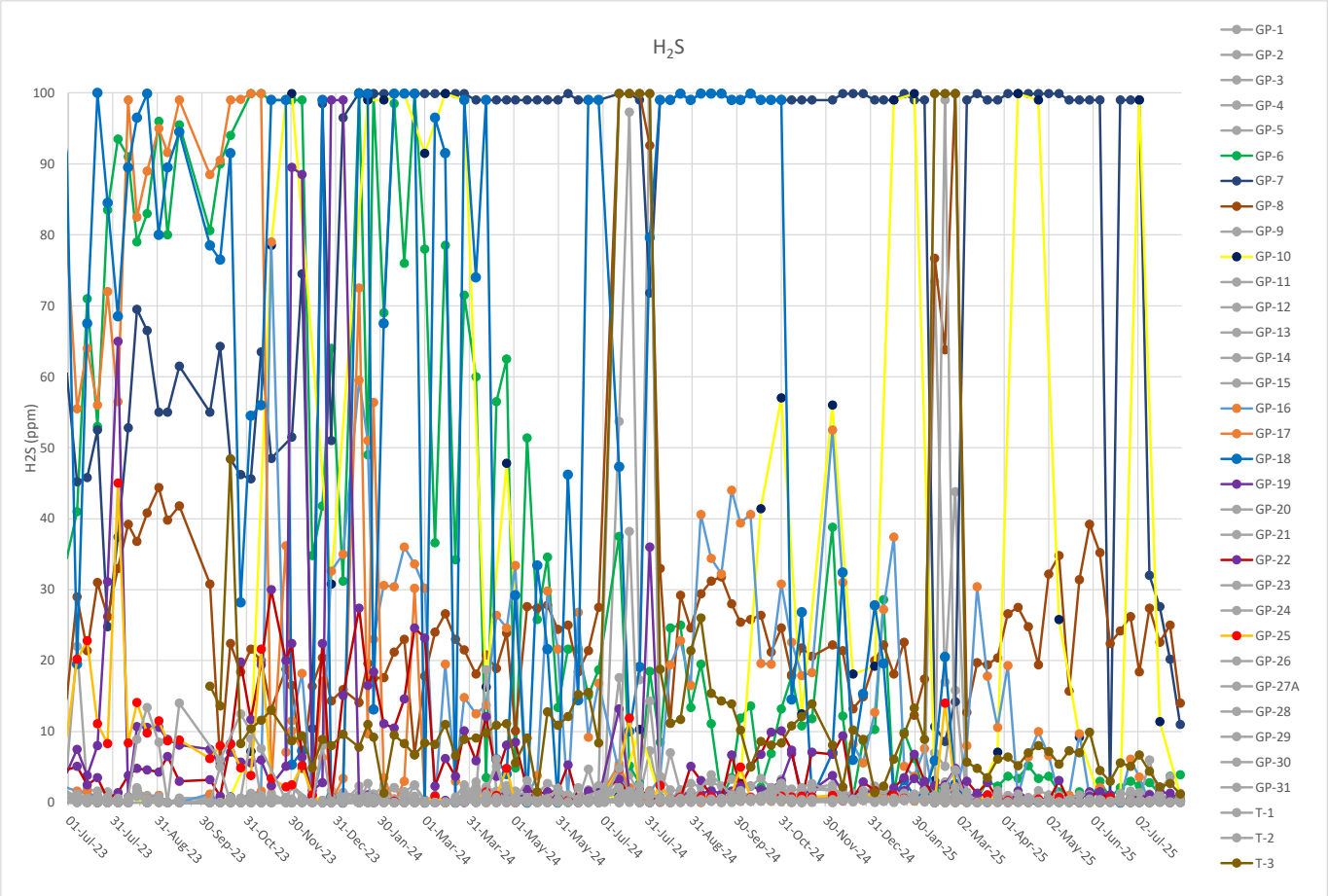
Slight increase in VOC's following July 1 air incursion event is indicative of increased smoulder activity.



Hydrogen Sulfide

H_2S data continues to be noisy, likely affected by atmospheric pressure fluctuation. Most locations are low, and historically high wells (GP-7, GP-10) have also lowered to 20ppm.

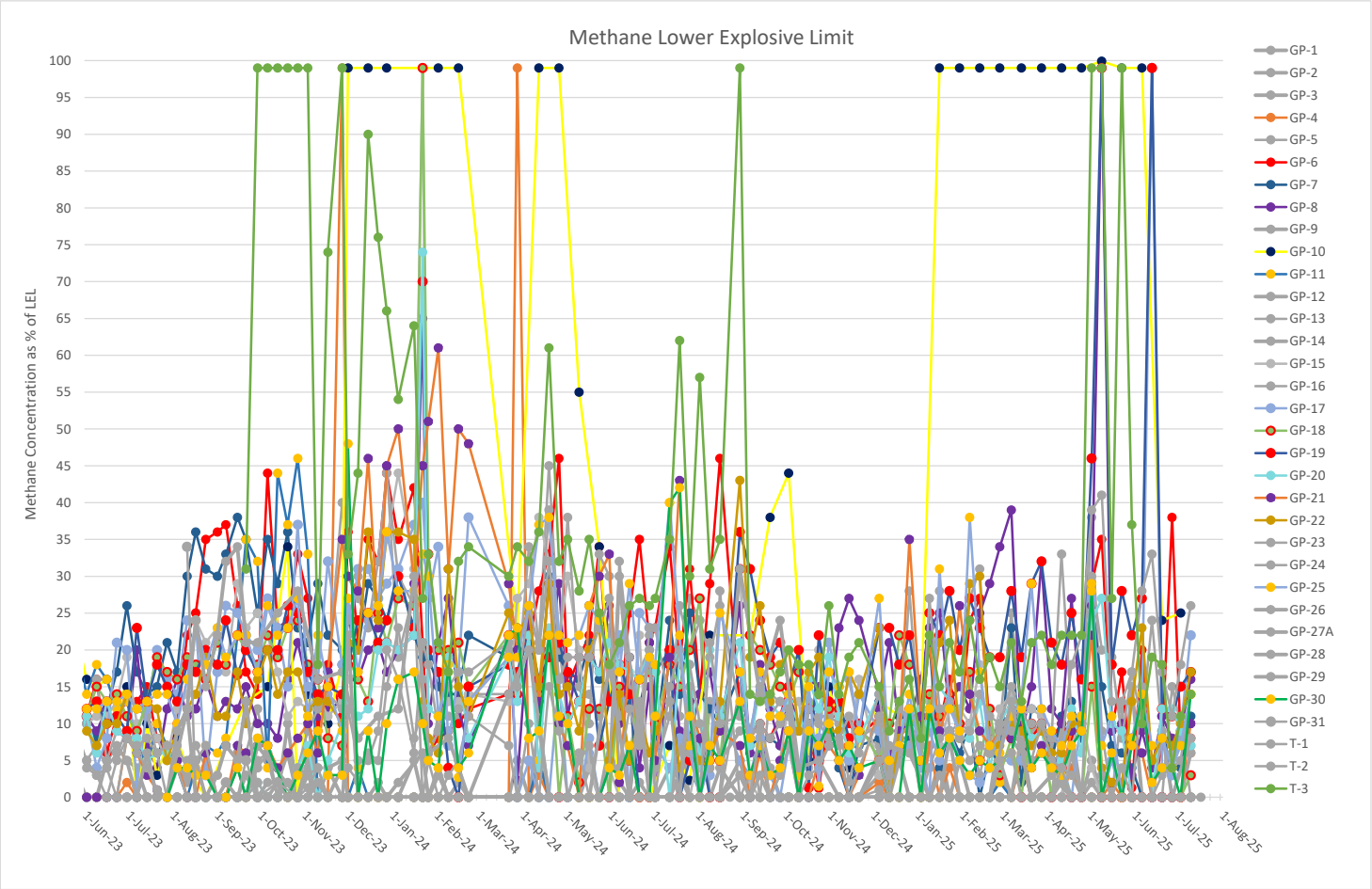
As mentioned previously, it is possible that the H_2S sensor is being impacted by CO cross interference. With CO concentration decreasing, reported H2S concentration is dropping as well.



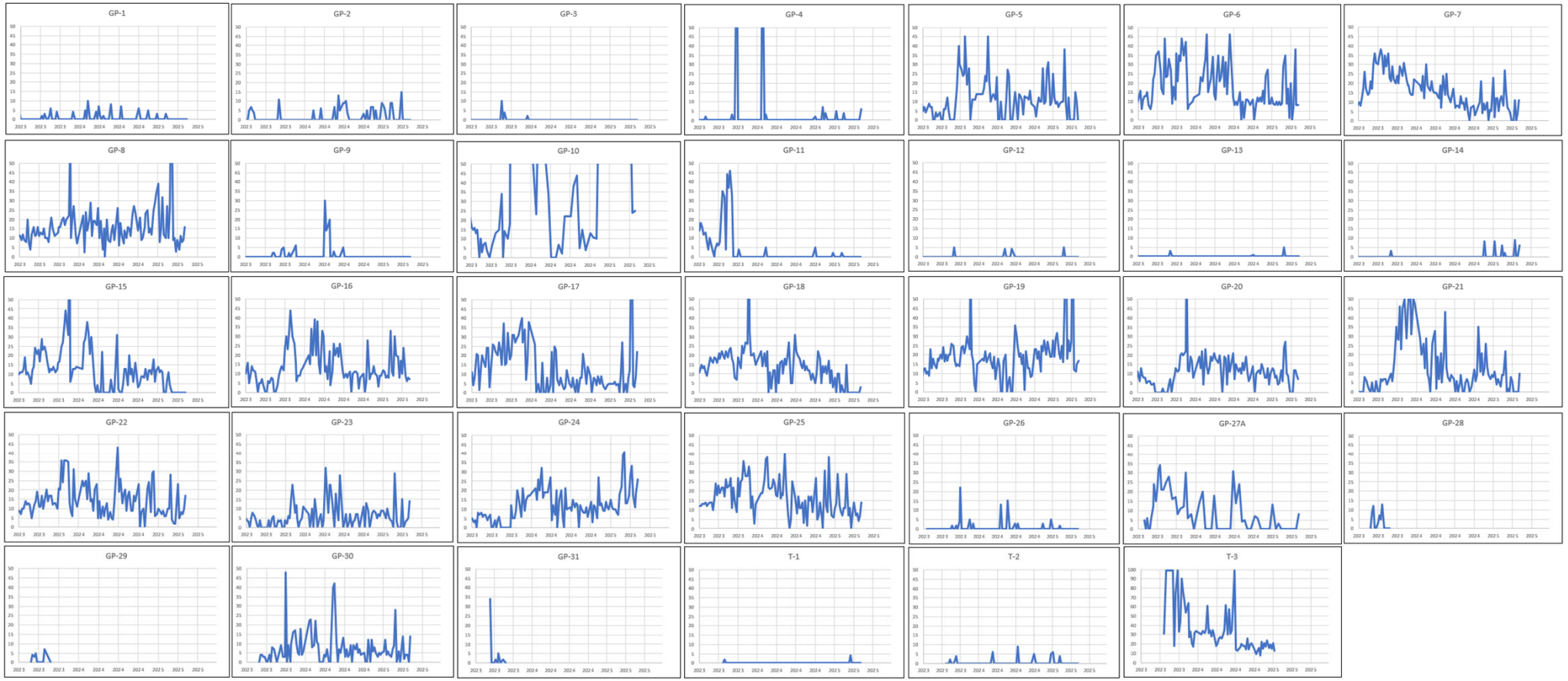
Lower Explosive Limit

Many data points are fluctuating wildly – the direct methan composition is a better indicator of levels within the landfill.

As LEL is measured with the MultiRAE, the last three monitoring events were not recorded in July.



LEL for individual GP



Methane

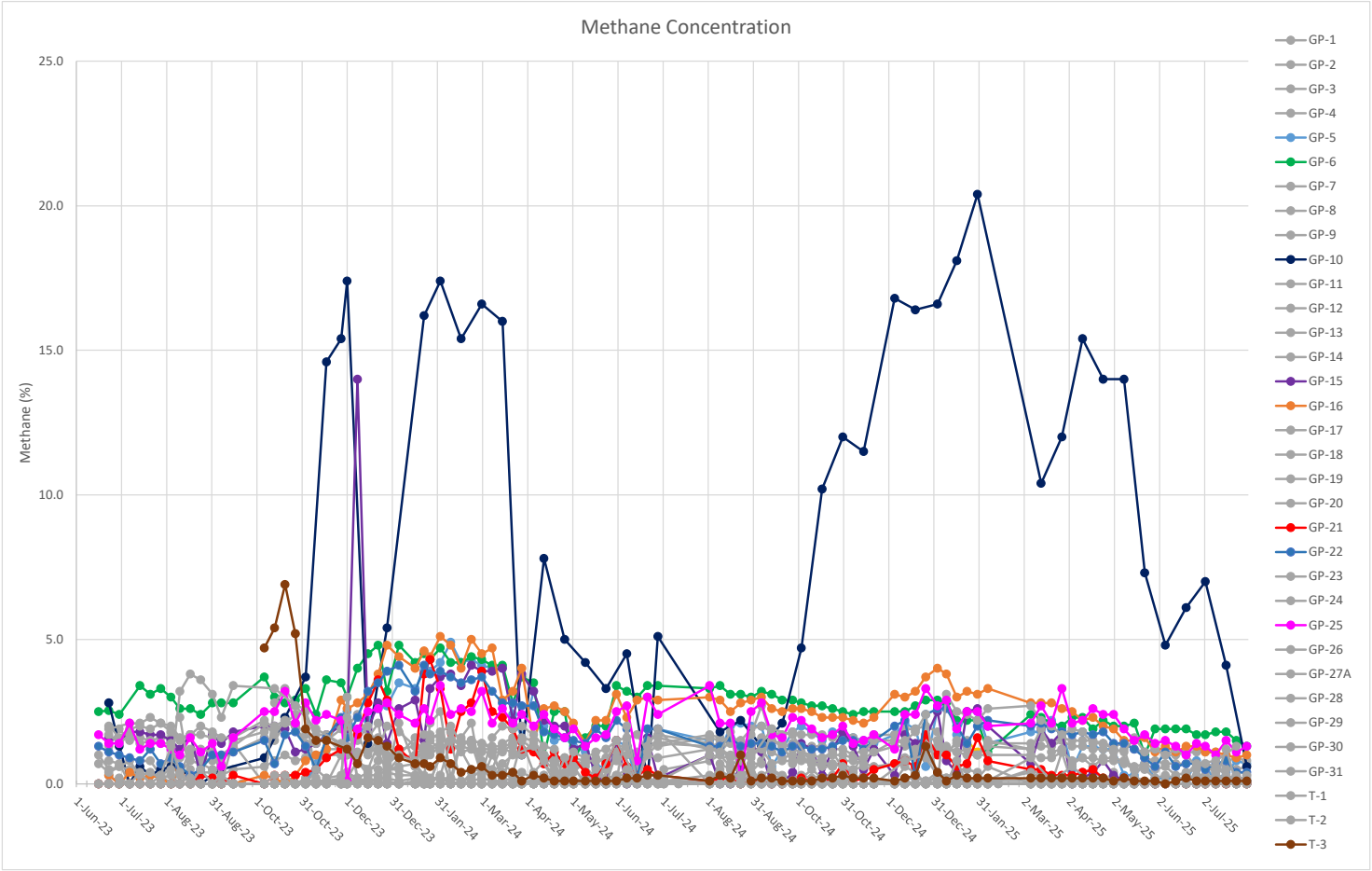
Methane levels for most wells are converging between 0 and 2.5% indicating that landfill is not biologically active.

Only well GP-10 has been indicating higher methane concentrations, but has recently fallen down to less than 1%.

This is indicative of a large atmospheric air incursion event.

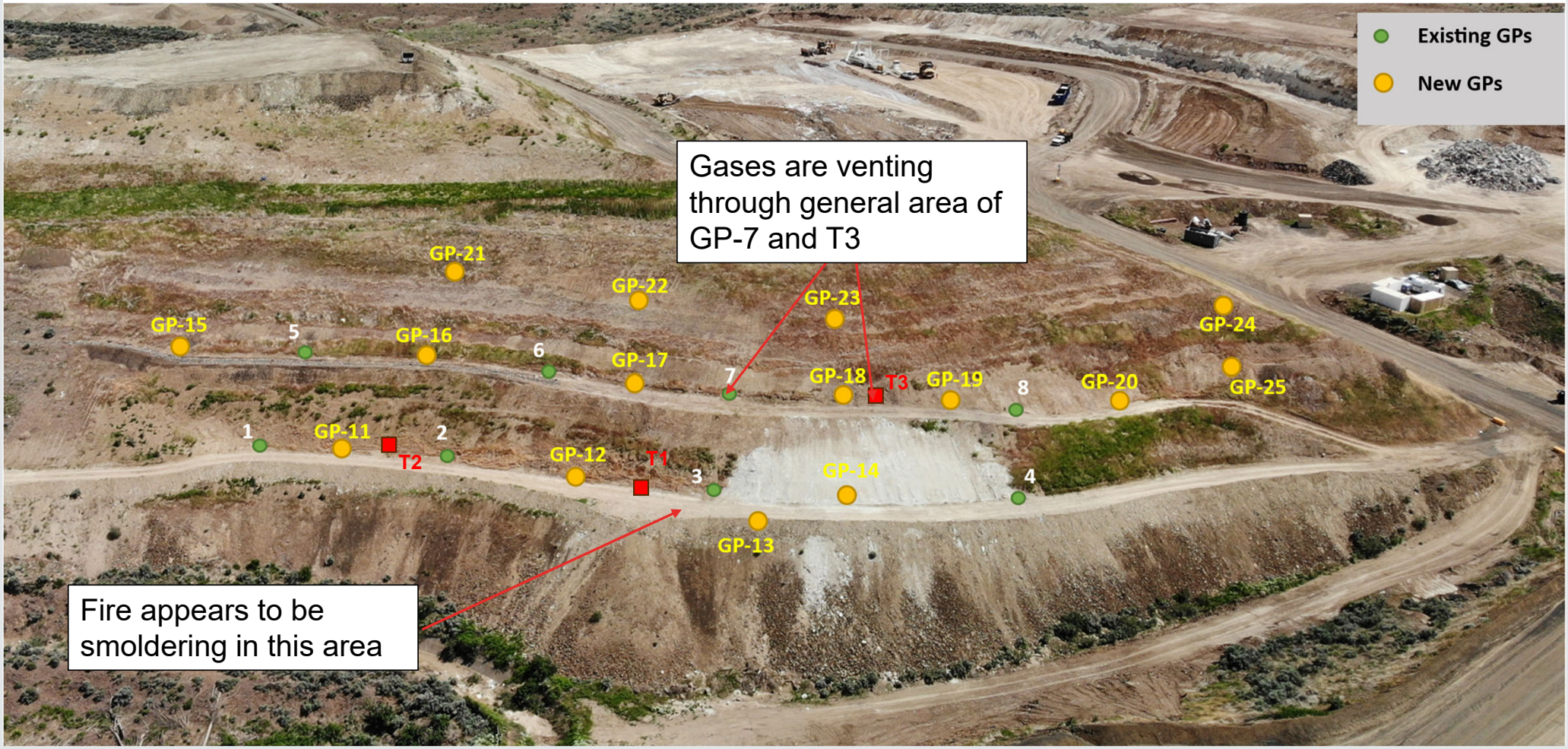
There appears to be a seasonal fluctuation with high methane levels occurring in Jan of each year in crest monitor GP-10.

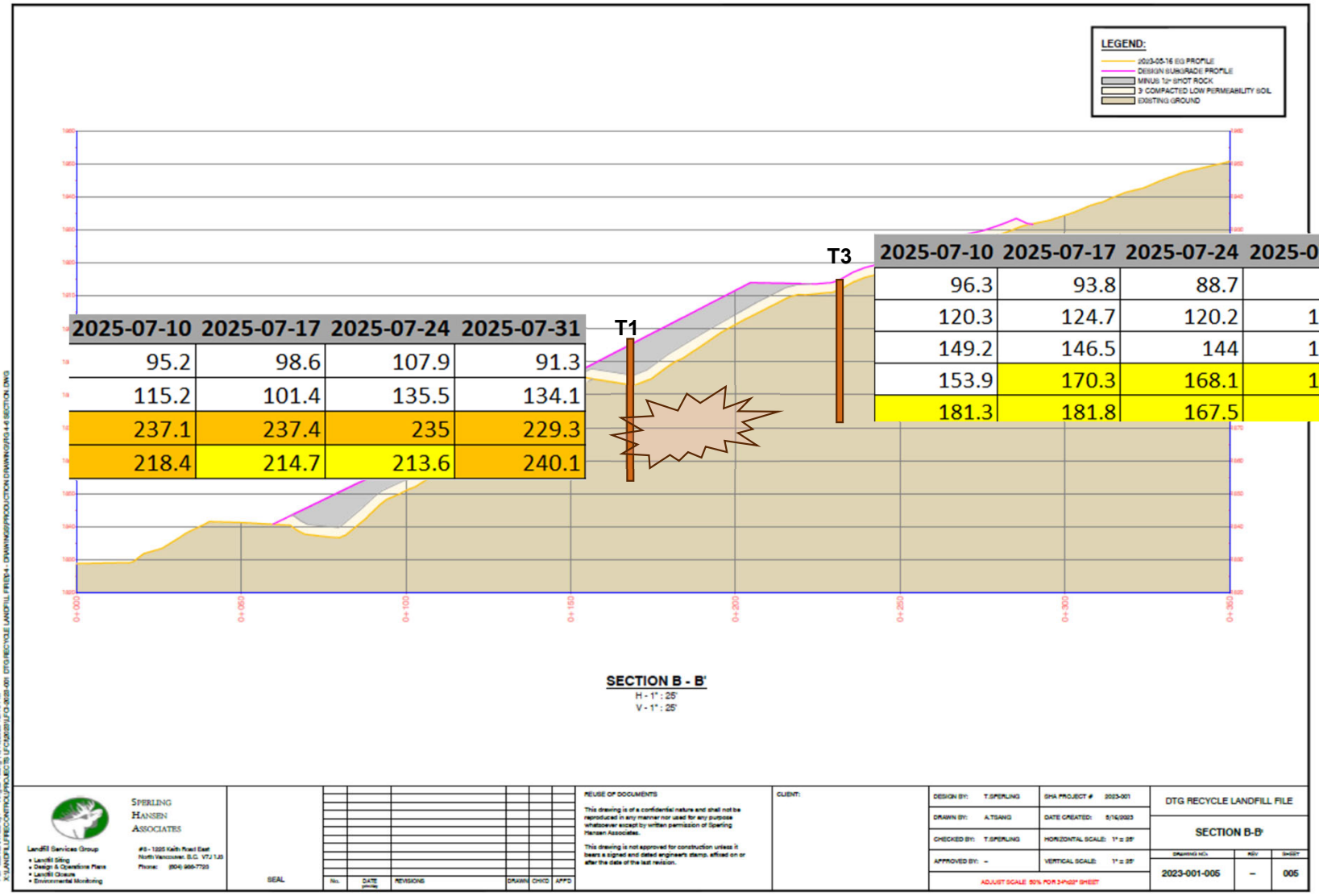
Cause is unclear, possibly due to freezing or snow pack on landfill surface?




LANDFILLFIRE.com
GP-10
GP-21
GP-22
GP-23
GP-24
GP-15
5
GP-16
6
GP-17
GP-18
GP-19
GP-20
GP-25
1
GP-11
2
T2
GP-12
T1
3
GP-14
4
GP-13
Existing GPs
New GPs

Fire Path


Existing GPs
New GPs
Gases are venting through general area of GP-7 and T3
Fire appears to be smoldering in this area
GP-21
GP-22
GP-23
GP-15
5
GP-16
6
GP-17
7
GP-18
T3
GP-19
8
GP-20
GP-24
GP-25
1
GP-11
T2
2
GP-12
T1
3
GP-14
4
GP-13



2025-07-10	2025-07-17	2025-07-24	2025-07-31
95.2	98.6	107.9	91.3
115.2	101.4	135.5	134.1
237.1	237.4	235	229.3
218.4	214.7	213.6	240.1

2025-07-10	2025-07-17	2025-07-24	2025-07-31
96.3	93.8	88.7	92
120.3	124.7	120.2	121.7
149.2	146.5	144	144.1
153.9	170.3	168.1	167.9
181.3	181.8	167.5	175

SECTION B - B'

H - 1" : 25'

V - 1" : 25'

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X:\LANDFILL\RECONTROL\PROJECTS\FC\2023\01\FC-2023-001 DTG\RECYCLE LANDFILL FILE\24 - DRAWINGS\PRODUCTION DRAWING\01\01-04 SECTION.DWG

SPERLING HANSEN ASSOCIATES

Landfill Services Group
- Landfill Siting
- Design & Operations Plans
- Landfill Closure
- Environmental Monitoring

#9 - 1225 Keith Road East
North Vancouver, B.C. V7J 1J3
Phone: (604) 986-7725

SEAL

No.	DATE (yy/mm/dd)	REVISIONS	DRAWN	CHKD	APP'D

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CLIENT:

DESIGN BY:	T.SPERLING	SHA PROJECT #	2023-001
DRAWN BY:	A.TSANG	DATE CREATED:	5/15/2025
CHECKED BY:	T.SPERLING	HORIZONTAL SCALE:	1" = 25'
APPROVED BY:	–	VERTICAL SCALE:	1" = 25'

ADJUST SCALE 50% FOR 34"x22" SHEET

DTG RECYCLE LANDFILL FILE

SECTION B-B'

DRAWING NO.	REV	SHEET
2023-001-005	–	005

Data Interpretation

LFCI believes that suppression efforts continue to work, but slowly. 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. Current seasonal warming may be contributing to slowing the cooling trend, as seen in the lower temperature wells over the summer of 2025.

Temperatures have dropped significantly all around to Dec. 2024 when the trend has shifted to a steady condition, with minimal changes occurring. In July, temperatures of the hottest well (GP-3) have continued to decrease at a slow but steady rate.

In LFCI experience, CO has been best indicator of suppression at other landfill sites. CO in T-3 has risen between Jan and May 2025 since it's dramatic decrease in November-December of 2024. In July, CO levels have once continued to trend downward, in part due to reduced H2 levels which also influence CO sensor.

VOC levels have been steadily declining, indicating less smolder activity.

High O2 continues to fluctuate - this is likely due to large atmospheric pressure swings and pervious waste mass allowing entry of ambient air. The recent increases in O2 starting July 1, 2025 are of concern. As atmospheric pressure has been declining and no large pressure swings noted, LFCI is concerned about possibility decreasing effectiveness of soil cover due to desiccation or settlement cracking. Cover integrity should be inspected.

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 and GP-20.