

July 10, 2026
Revised July 15, 2026
File No. 01204123.21-13

Mr. Baitong Chen
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

Subject: Revised Monthly Reaction Mitigation Area Boundary Determination
Chiquita Canyon Landfill – Castaic, California

Dear Mr. Chen:

In accordance with Condition Nos. 9(a) and 9(b) of the Modified Stipulated Order for Abatement (SOFA) pertaining to the Chiquita Canyon Landfill (Landfill or Facility) (Case No. 6177-4), as last modified on June 3, 2026, SCS Engineers (SCS), on behalf of Chiquita Canyon, LLC (Chiquita), has prepared this revised data-determined Reaction Mitigation Area boundary determination for June 2026.

This revised Reaction Mitigation Area boundary determination has been developed to incorporate the temperature probe data and is intended to supersede the boundary determination that was submitted on July 10, 2026. This revision includes this data in **Attachment B** and the determination considers the following criteria:

- Vertical landfill gas (LFG) wellhead temperatures (greater than 160 degrees Fahrenheit).
- Temperature monitoring probe (TMP) measurements (greater than 170 degrees Fahrenheit for more than 3-weeks at any depth).
- Landfill gas quality and methane to CO₂ ratio (CH₄:CO₂) (methane concentrations of less than 30 percent in conjunction with CH₄:CO₂ ratios less than 1.0).
- Landfill gas concentration of carbon monoxide (CO) (greater than 1,500 ppm) to the extent measured.
- Landfill gas concentration of hydrogen (H₂) (greater than 2 percent by volume), to the extent measured.
- Landfill settlement (18 inches or greater within a 60-day period).
- Pressurized leachate releases.

These parameters have been subjected to a cumulative evaluation within each individual landfill surface grid within the Main Canyon (i.e., excluding grids 1 through 29 as well as grids 105 through 144), including all landfill gas wells, temperature probes, and other characteristics within that grid's area. Under the recently modified Condition No. 9(b), for each individual landfill grid that is contiguous to the prior month's Reaction Mitigation Area, where any three or more parameters listed



above are present at the time of evaluation, including any combination of wells, temperature probes, or areas within the grid, the Reaction Mitigation Area boundary depicted on the Reaction Mitigation Area map (**Attachment A**) will include such landfill grid(s).

For each individual landfill grid that is not contiguous to the prior month's Reaction Mitigation Area, if the three parameters present include a temperature parameter (the first or second parameter listed above), then the grid will be added to the Reaction Mitigation Area. For each individual landfill grid that is not contiguous to the prior month's Reaction Mitigation Area, if the three parameters present do not include a temperature parameter, then Chiquita will conduct field testing for CO using colorimetric tubes and for H₂ using field instrumentation. If field testing confirms the presence of either CO or H₂ at concentrations in excess of the lower limits of the instrumentation, then a sample of the LFG will be obtained from the wellhead and subjected to lab analytical testing using U.S. EPA Method ALT-144 for CO and ASTM Method D-1946 for H₂. If the lab testing confirms that either of these parameters exceed the values listed above, then the grid will be added to the Reaction Mitigation Area.

In addition to the parameters listed above, the following factors were also considered in determining the Reaction Mitigation Area boundary, applying the same individual landfill grid-based methodology described above:

- Leachate seeps;
- Odor characteristics;
- Wellheads experiencing conditions which would be expected to result in a PLR (e.g. elevated pressure, elevated temperature, liquid flow through wellhead); and
- Waste cuttings according to borehole drilling logs.

Supporting evidence, including documentation of which parameters were met or exceeded for each individual landfill grid, field testing and laboratory results (if applicable), explanation for the determination, Reaction Mitigation Area boundary, Reaction Mitigation Area map (if applicable), isothermal gradient range map consisting of wellhead temperature measurements, wellhead carbon monoxide range map, wellhead hydrogen range map, wellhead CH₄:CO₂ ratio range map, monthly landfill settlement isopach maps and 60-day isopach map, wellhead and temperature probe map with surface grids displayed, and vertical temperature profiles for temperature probes is being hereby submitted to the South Coast Air Quality Management District.

Attachment A presents the Drawing, titled "Reaction Mitigation Area Map", which depicts the Reaction Mitigation Area boundary as prescribed in Condition No. 9(a), which corresponds to the limits of Cells 1/2A, 2B/3, 4, and Module 2B/3/4 P2, as a solid black line. The Drawing also depicts the Condition No. 9(b) data-determined Reaction Mitigation Area as a dashed magenta line.

REACTION MITIGATION AREA BOUNDARY

Based on the parameters and considerations above, the Reaction Mitigation Area boundary includes those grids corresponding to the area encompassed by last month's data-driven Reaction Mitigation Area boundary determination, excluding Grid No. 41 and including Grid Nos. 81 and 182.

Based on input from Chiquita, the change in landfill surface elevations in select grids positioned in the northeastern portion of Cell 1/2A and Module 2B/3/4 P2, as well as to the south of Cell 2B/3 and Module 4, was affiliated with earthwork, grading, and stripping of intermediate cover in preparation for ethylene vinyl alcohol (EVOH) geomembrane cover deployment. While it is recognized that some settlement in these areas may have occurred, the earthwork and cover removal activities are believed to be the predominant contributor to the elevation change experienced over the past month or so. Accordingly, the landfill surface elevation change in these grids was not considered to exhibit the settlement criteria during this monthly exercise.

Parameters in Contiguous Grids

- Grid No. 81 is positioned immediately east of and adjacent to Grid No. 149, south of and adjacent to Grid No. 53, and north of and adjacent to Grid No. 82, all three of which were included in last month's Reaction Mitigation Area boundary. Accordingly, Grid No. 81 is being incorporated in the Reaction Mitigation Area boundary for this month as a contiguous surface grid based on the temperature, poor LFG quality, CO concentration, and H₂ concentration at well CV-2551.
- Grid No. 182 is positioned immediately northwest of and adjacent to Grid No. 181, and southwest of and adjacent to Grid No. 183, both of which were included in last month's Reaction Mitigation Area boundary. Accordingly, Grid No. 182 is being incorporated in the Reaction Mitigation Area boundary for this month as a contiguous surface grid based on the poor LFG quality at wells CV-1901, CV-2336, and CV-24141.

Parameters in Non-Contiguous Grids

- Grid No. 41 was included in last month's Reaction Mitigation Area boundary as a non-contiguous grid. Although the grid contains one well that exhibits the poor LFG quality and H₂ concentration criteria, a third parameter was not present within this grid this month. Accordingly, Grid No. 41 is being removed from the Reaction Mitigation Area boundary for this month as a non-contiguous surface grid.

CONCLUSION

As presented on the Drawing included as **Attachment A**, and for the reasons described above, the extent of the data-determined Reaction Mitigation Area (dashed magenta line) includes Cells 1/2A, 2B/3, 4, and Module 2B/3/4 P2 as decreed in the SOFA (solid black line), and Grid Nos. 53, 76, 77, 81, 82, and 145 through 149.

The maximum temperature measurements recorded at the 40 in-situ waste temperature monitoring probes presented in **Attachment B** in graphical format were excluded from the original submission because of technical difficulties extracting the measurements from the electronic database. This TMP data has been included in this revised submission now that the issue has been resolved. The LFG wellhead temperatures recorded at the extraction wells for the entire Landfill footprint are reflected on the isothermal gradient range map presented as **Attachment C**. The CH₄:CO₂ ratios measured at the LFG wellheads in the vicinity of the data-driven Reaction Mitigation Area boundary are depicted on the range map presented as **Attachment D**. The H₂ concentrations measured at the LFG wellheads in the vicinity of the data-driven Reaction Mitigation Area boundary are depicted on the range map presented as **Attachment E**. The CO concentrations measured at the LFG wellheads in

the vicinity of the data-driven Reaction Mitigation Area boundary are depicted on the range map presented as **Attachment F**. The landfill surface settlement isopach values measured on a monthly basis and 60-day basis in the vicinity of the data-driven Reaction Mitigation Area boundary are depicted on the range map presented as **Attachment G**.

Please contact either of the undersigned if you have questions or require additional information.

Sincerely,



Robert E. Dick, PE, BCEE
Senior Vice President
SCS Engineers



Patrick S. Sullivan, BCES, CCP
Senior Vice President
SCS Engineers

RED/PSS

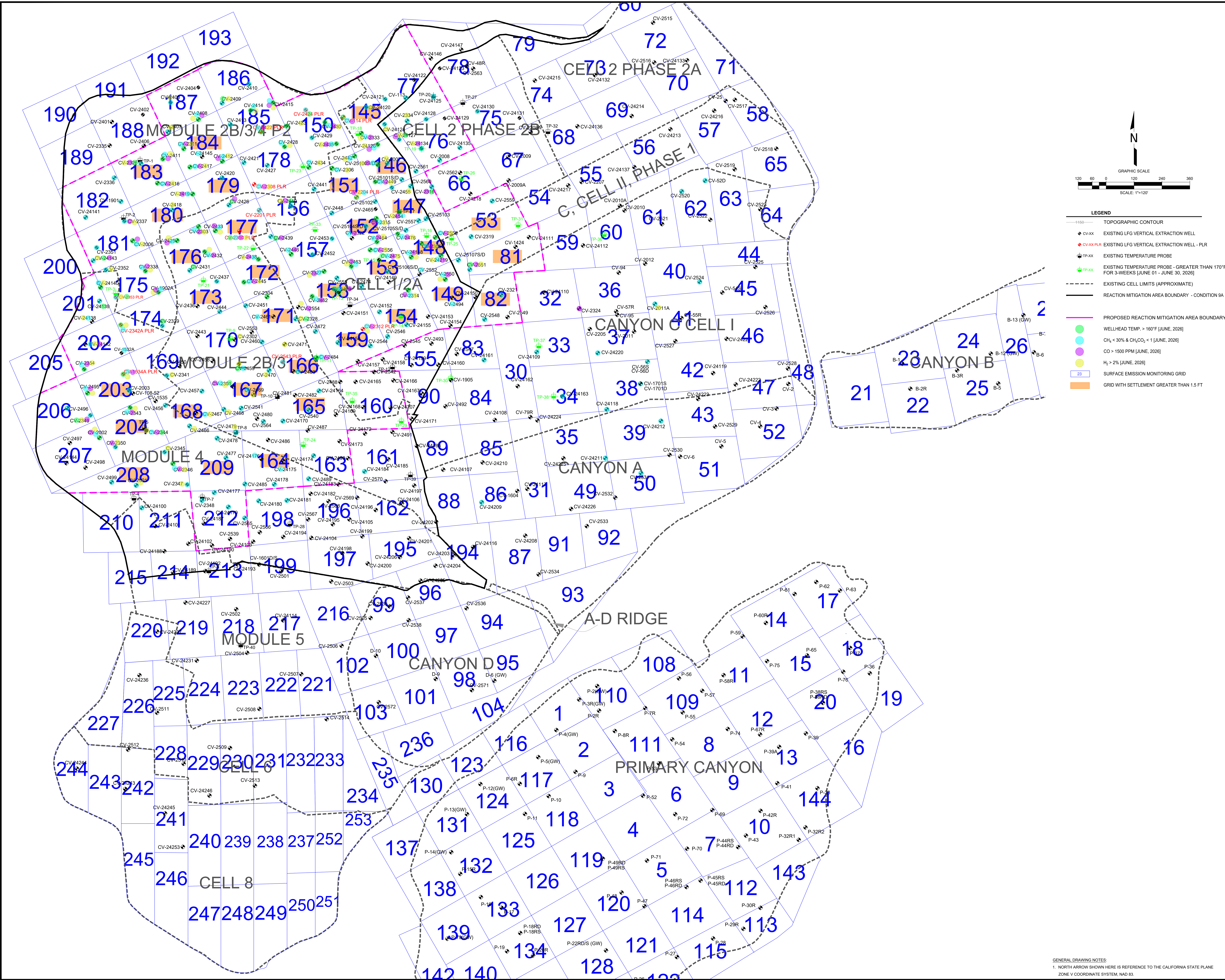
cc: Nathaniel Dickel, SCAQMD
Christina Ojeda, SCAQMD

Enclosures:

- Attachment A – Reaction Mitigation Area Map
- Attachment B – In-Situ Waste Temperature Monitoring Probe Data
- Attachment C – Isothermal Gradient Range Map
- Attachment D – Wellhead Methane-to-Carbon Dioxide Ratio Range Map
- Attachment E – Wellhead Hydrogen Range Map
- Attachment F – Wellhead Carbon Monoxide Range Map
- Attachment G – Settlement Isopach Range Maps

Attachment A

Reaction Mitigation Area Map



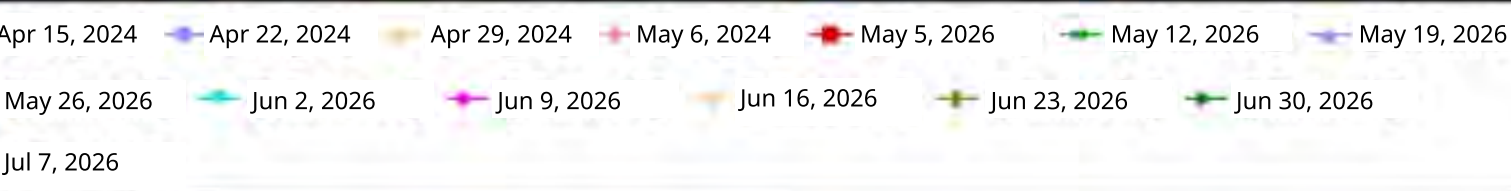
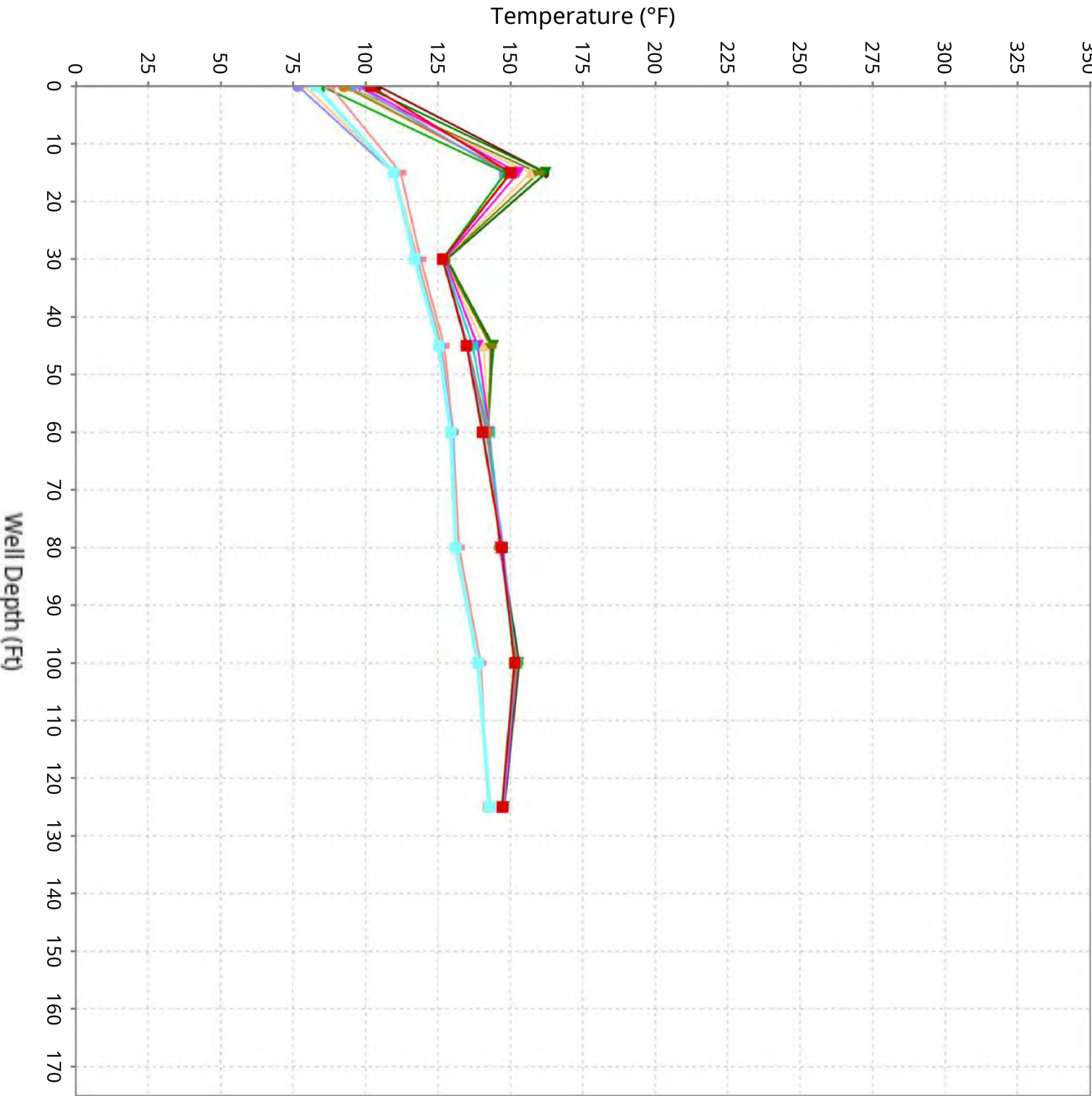
SCS ENGINEERS ENVIRONMENTAL CONSULTANTS 3500 RILEY AVENUE, SUITE 300 LONG BEACH, CA 90806 TEL: 562-415-5000 FAX: 562-415-5001 WWW.SCS-ENG.COM		CLIENT: CHIUQUITA CANYON LANDFILL CASTAIC, CALIFORNIA 		SHEET TITLE: REACTION MITIGATION AREA - JUNE 2026 PROJECT TITLE: CHIUQUITA CANYON LANDFILL CASTAIC, CALIFORNIA		NO. 1 2 3 4 5 6 7 8 9 10		DATE 	
DATE: 07/09/2026 SCALE: AS SHOWN		DRAWN BY: HA CHECKED BY: JAP DATE: 07/24/22		REVISION NO. 1 REVISION DATE 07/24/22		REVISION NO. 1 REVISION DATE 07/24/22		REVISION NO. 1 REVISION DATE 07/24/22	

Attachment B

In-Situ Waste Temperature Monitoring Probe Data

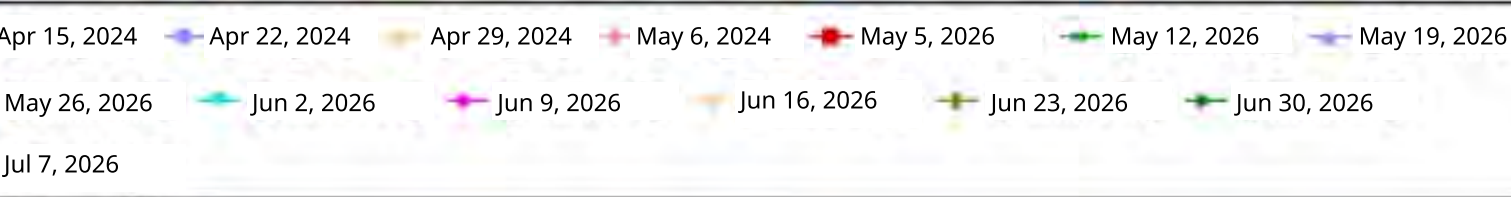
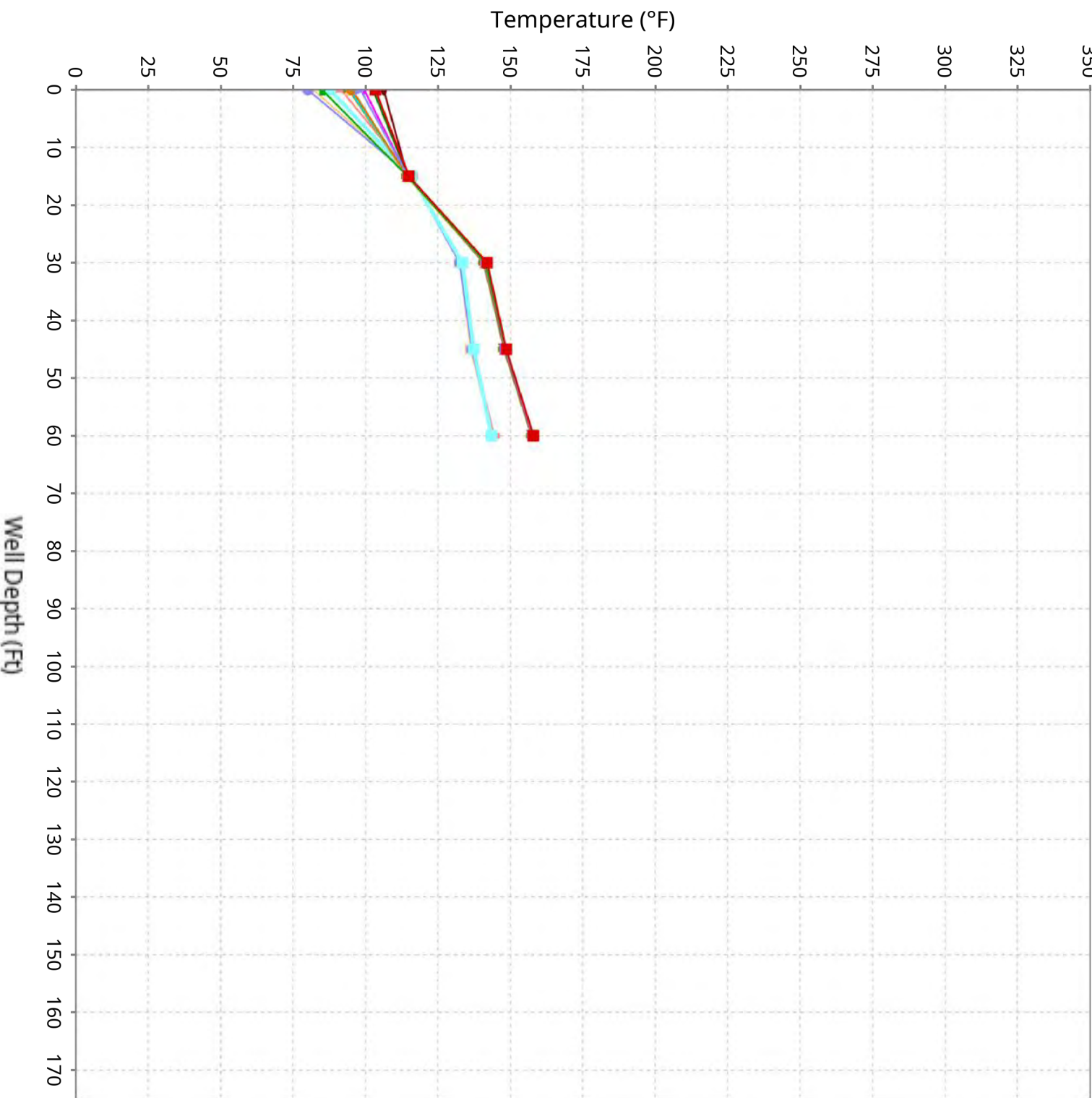
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-1

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



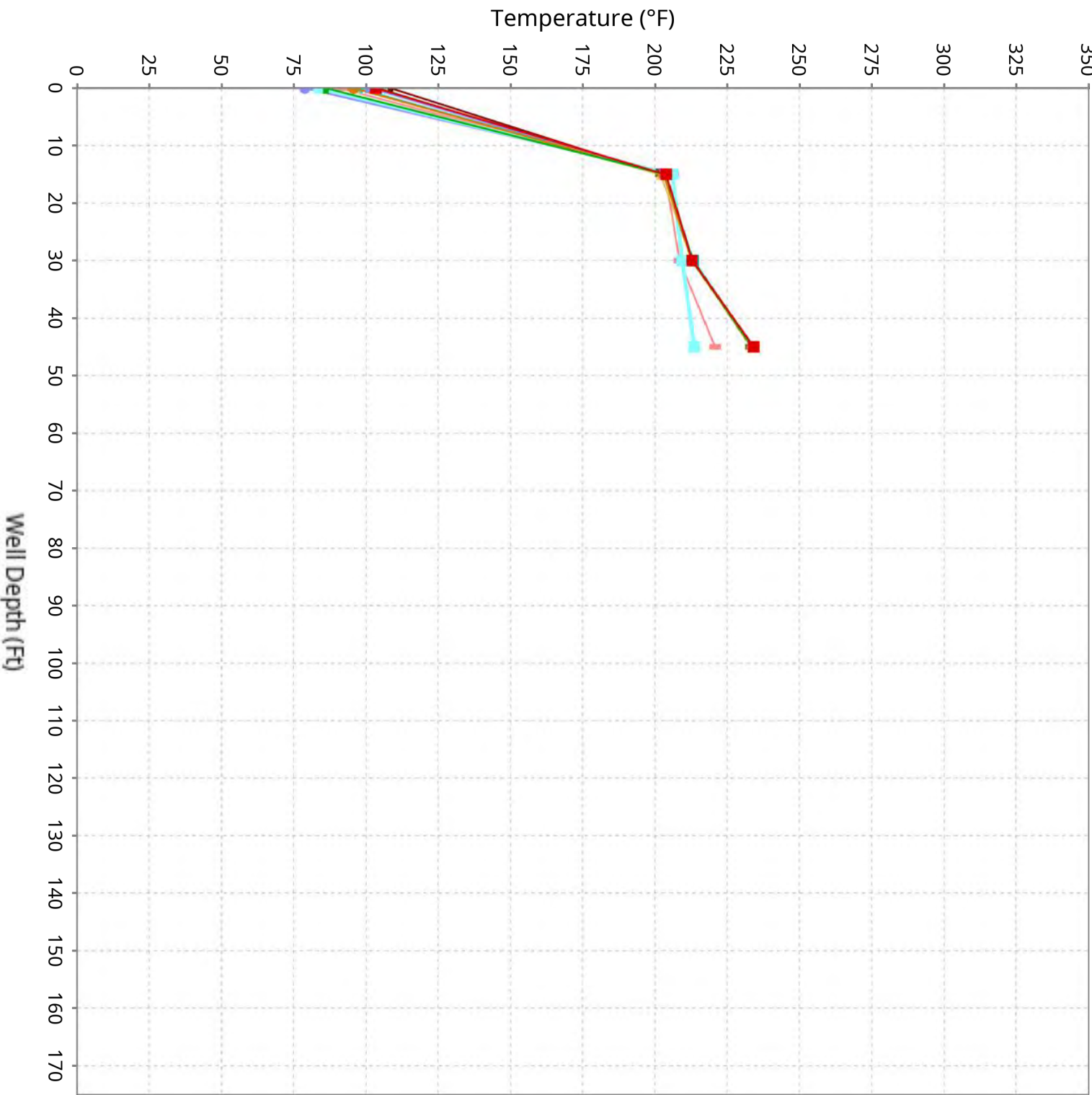
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-2

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



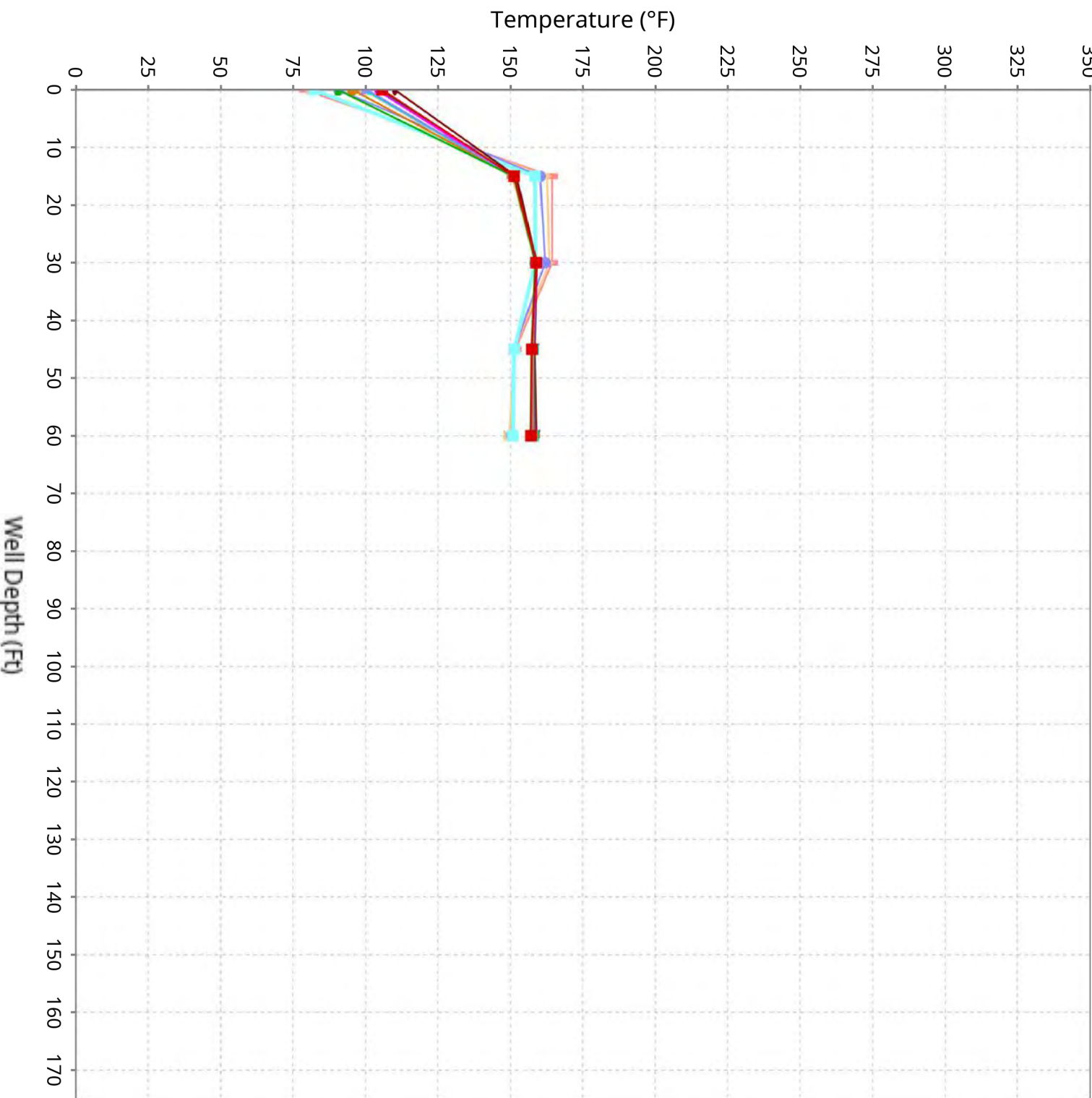
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-3

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



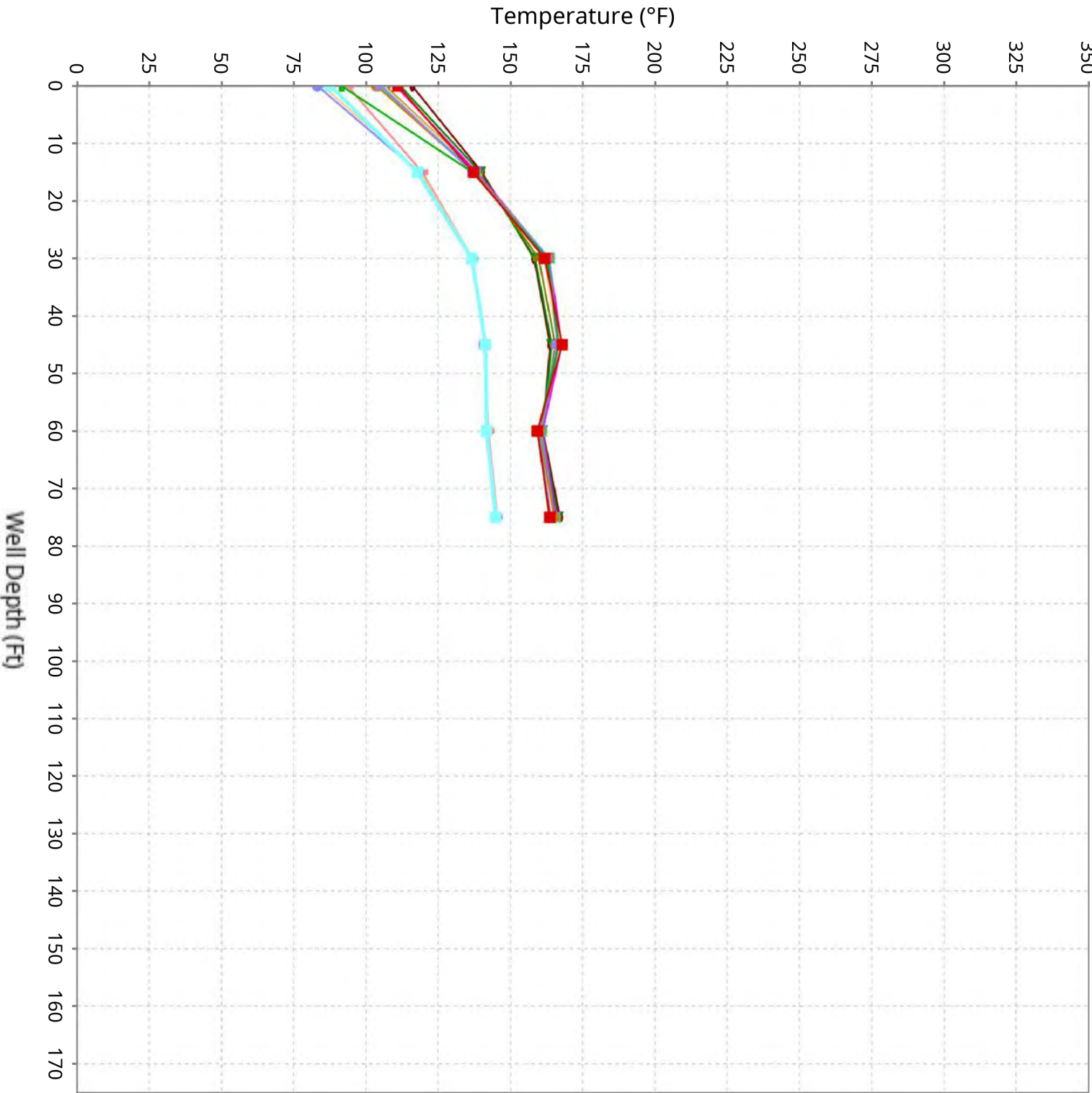
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-4

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



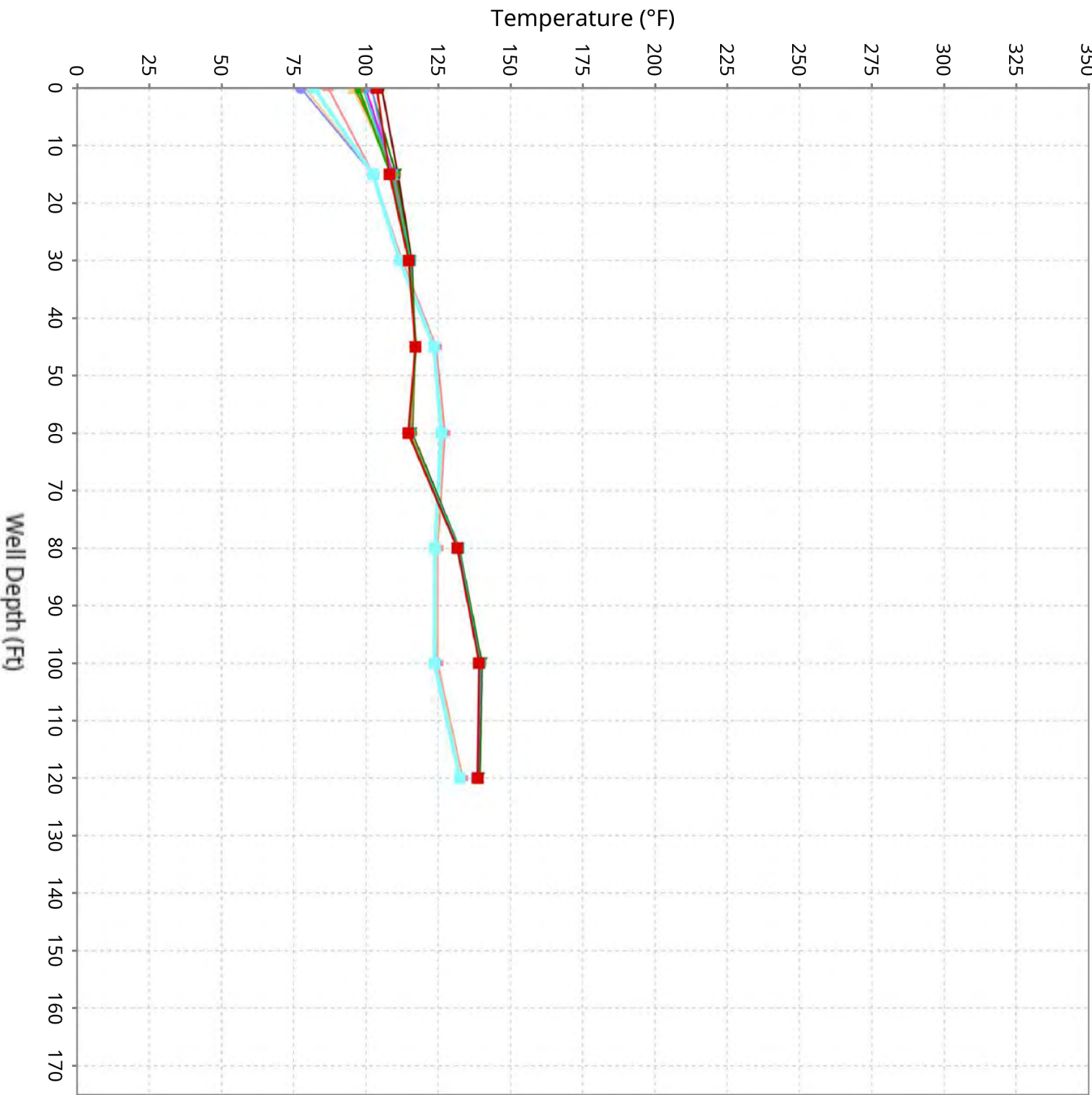
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-5

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



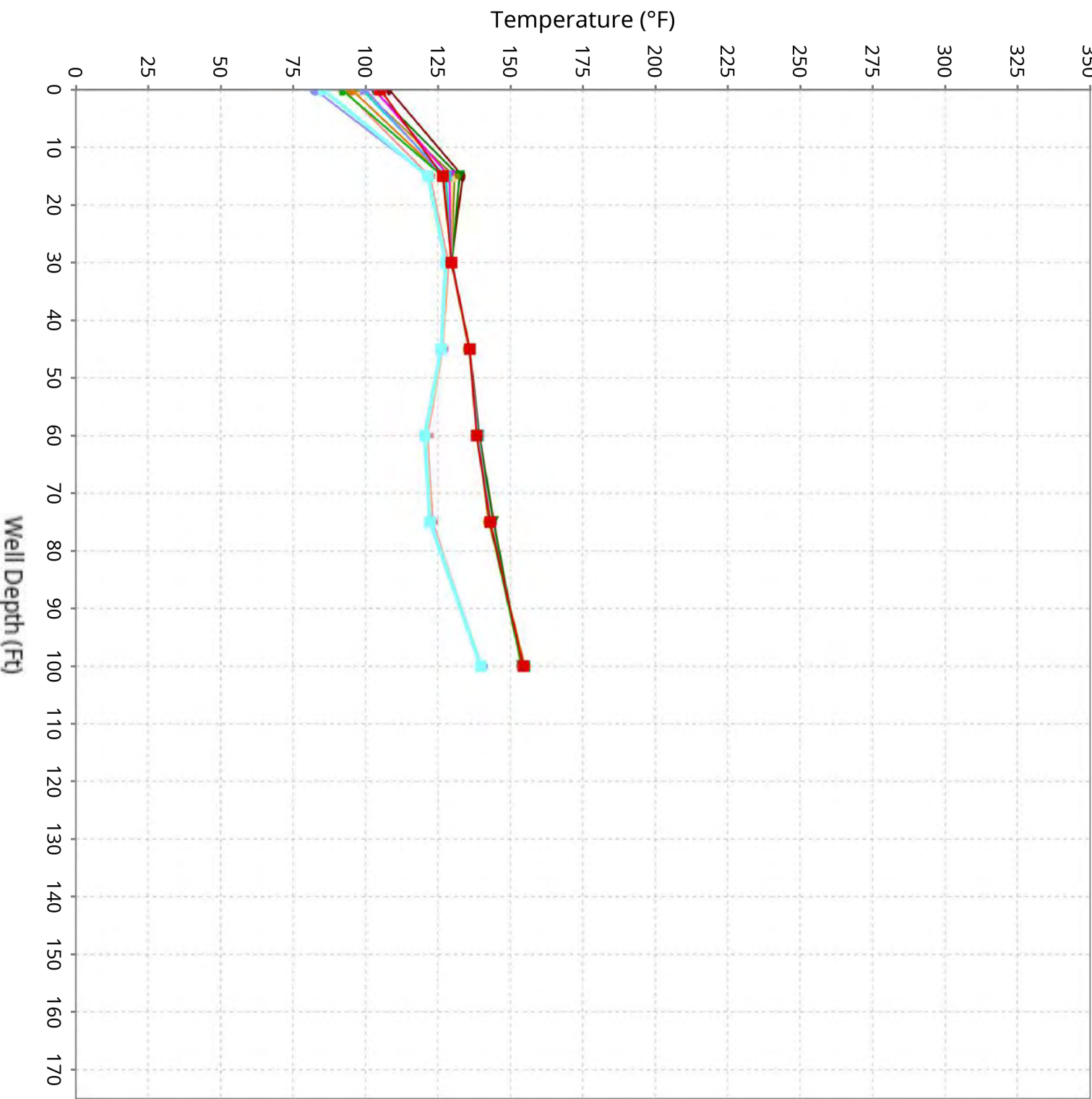
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-6

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-7

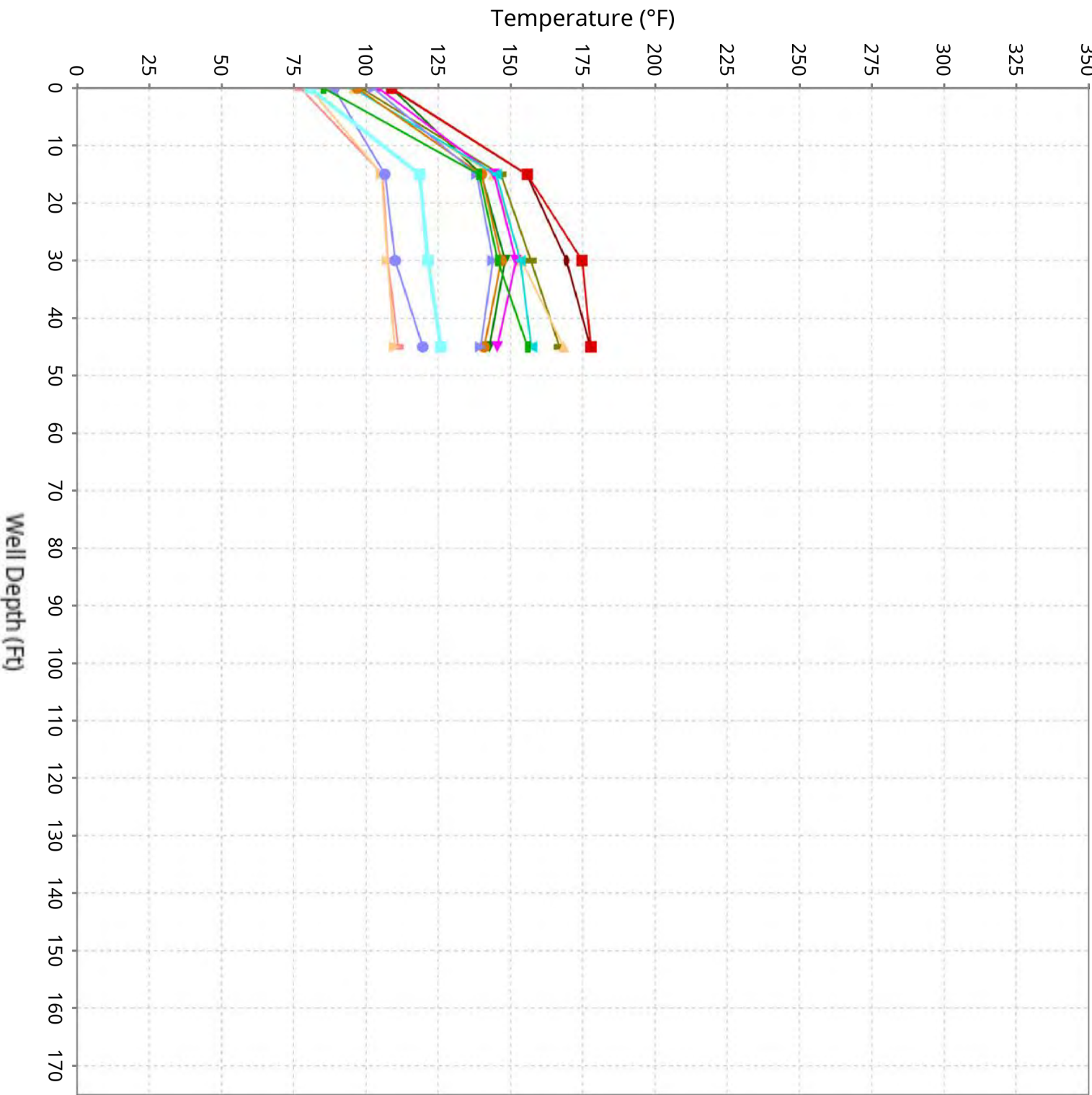
Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



- Apr 15, 2024
- Apr 22, 2024
- Apr 29, 2024
- May 6, 2024
- May 5, 2026
- May 12, 2026
- May 19, 2026
- May 26, 2026
- Jun 2, 2026
- Jun 9, 2026
- Jun 16, 2026
- Jun 23, 2026
- Jun 30, 2026
- Jul 7, 2026

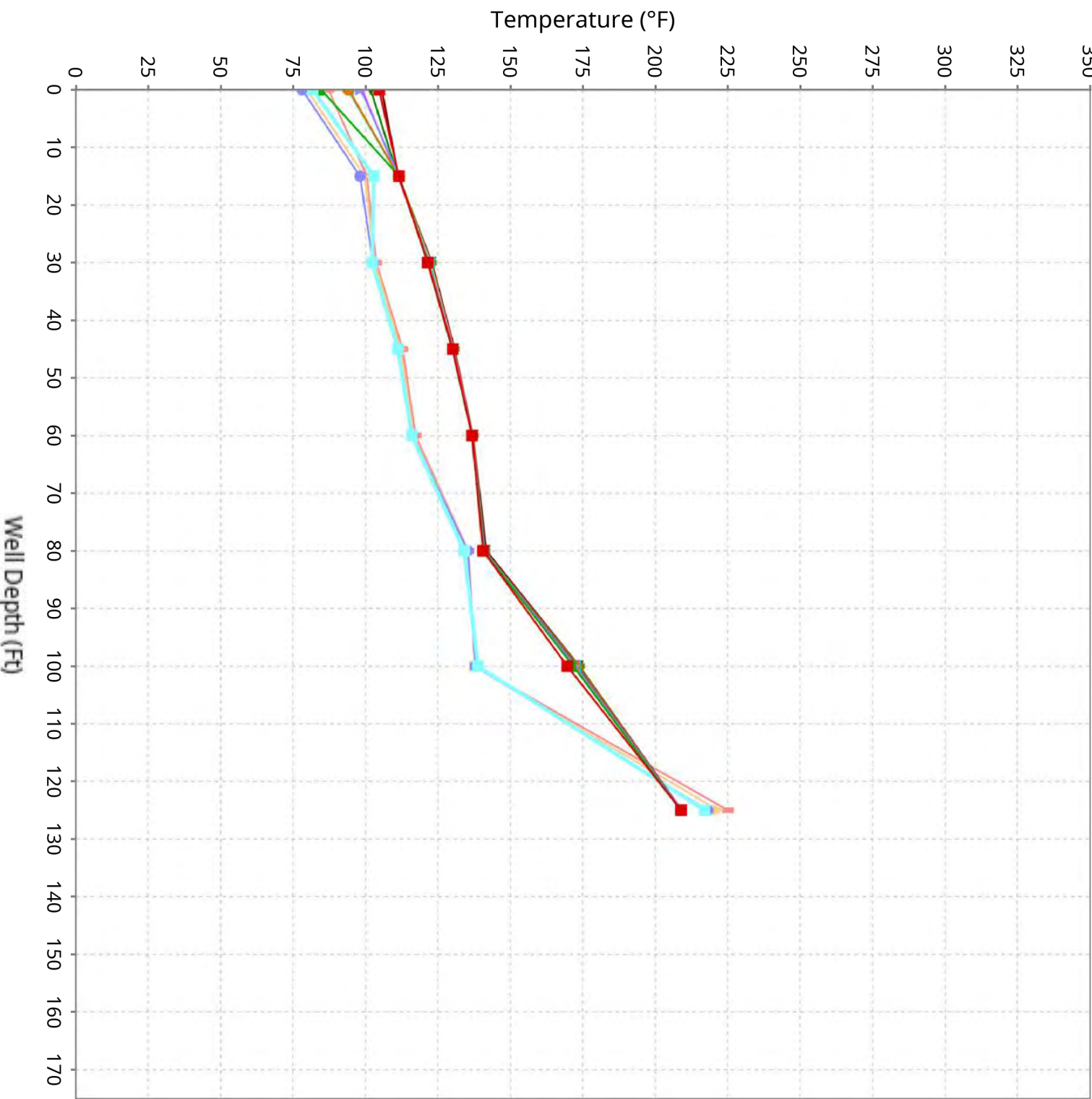
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-8

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



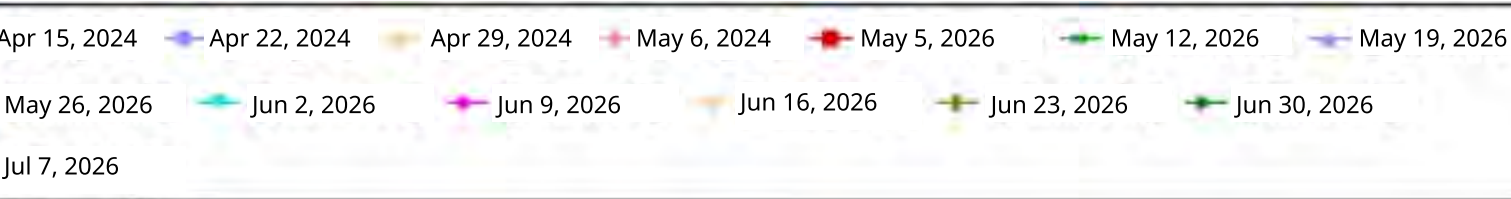
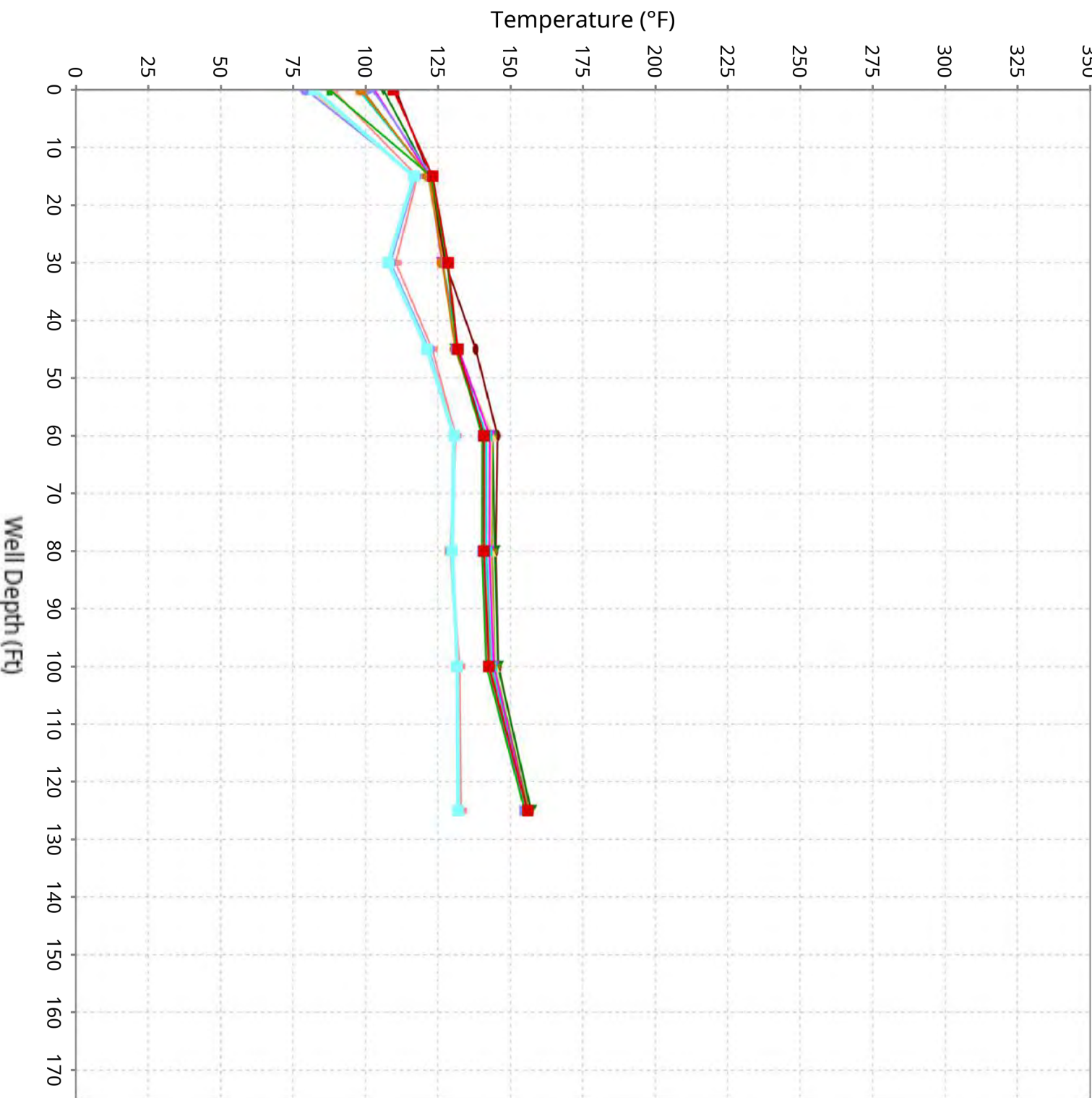
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-9

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



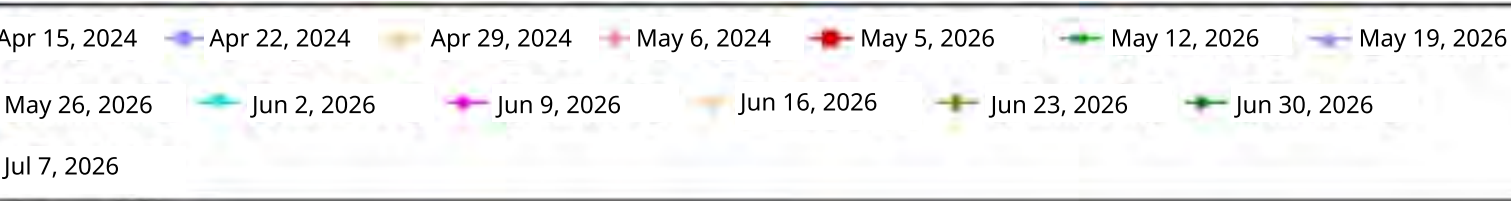
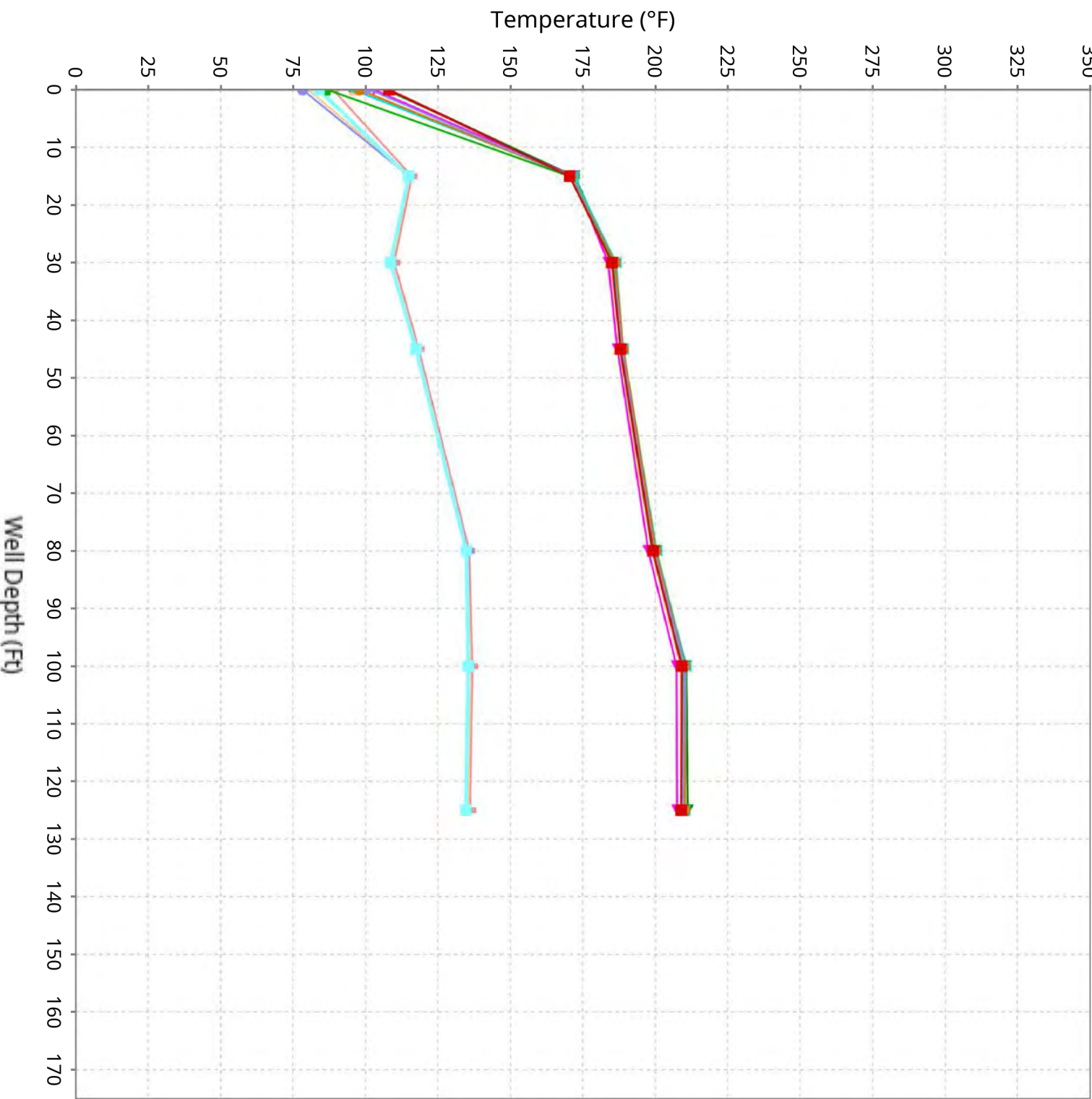
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-10

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



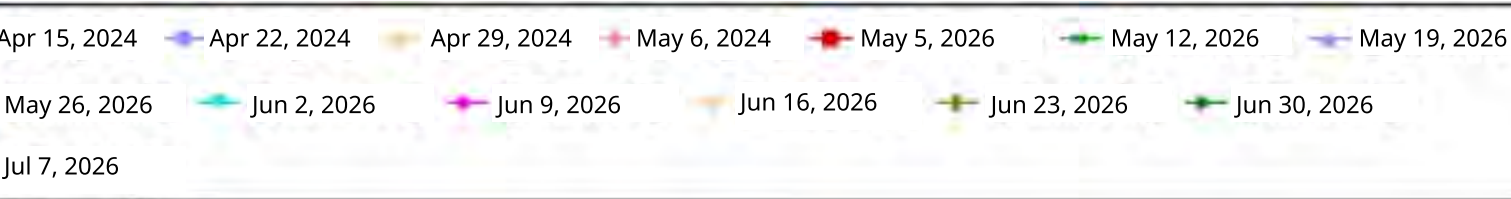
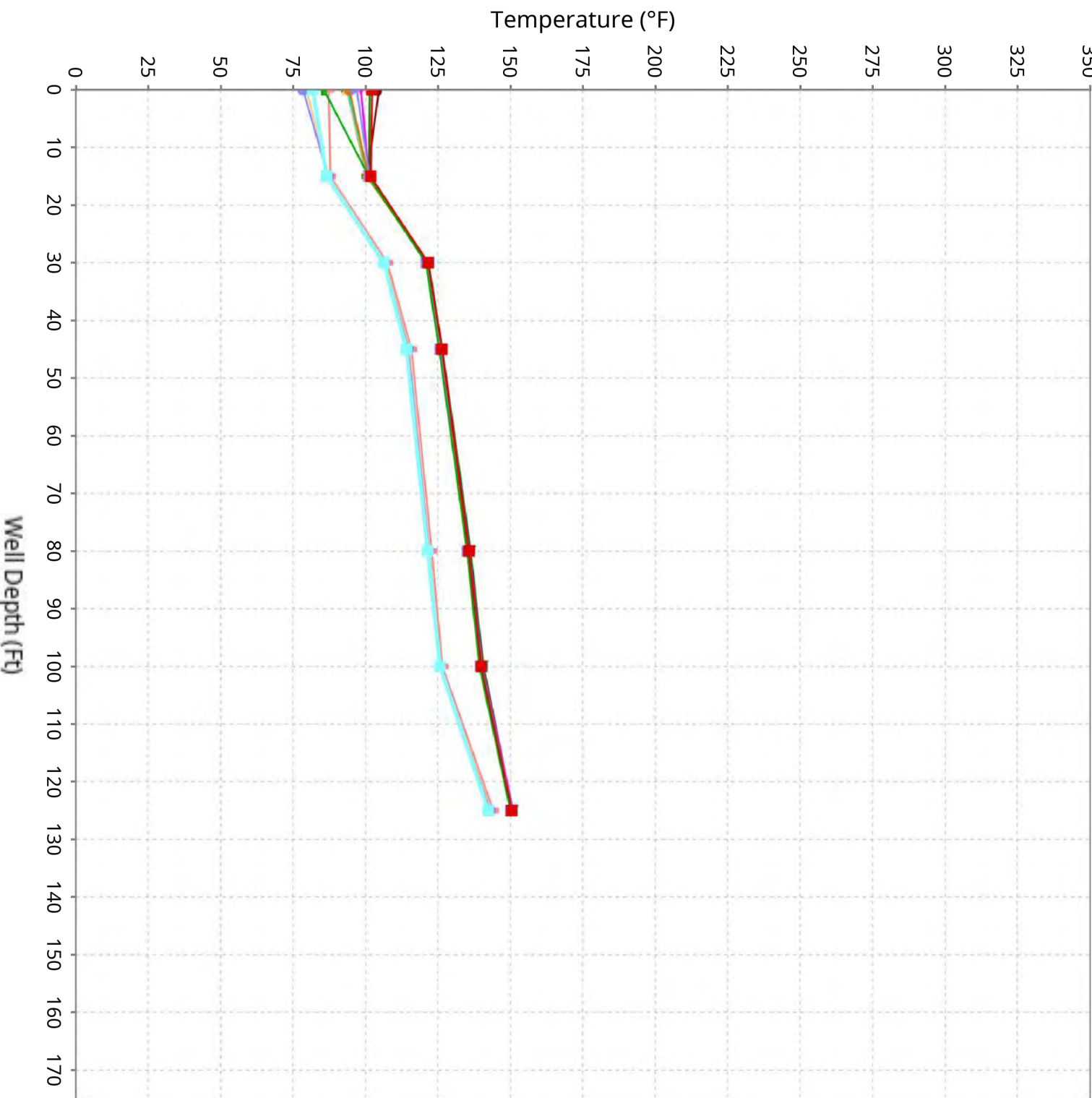
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-11

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



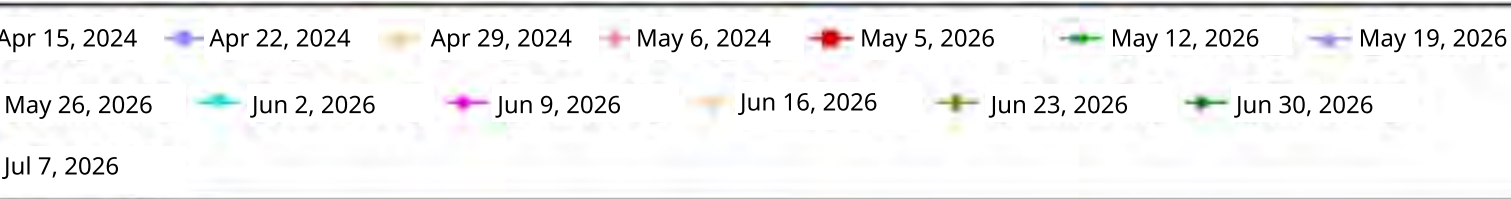
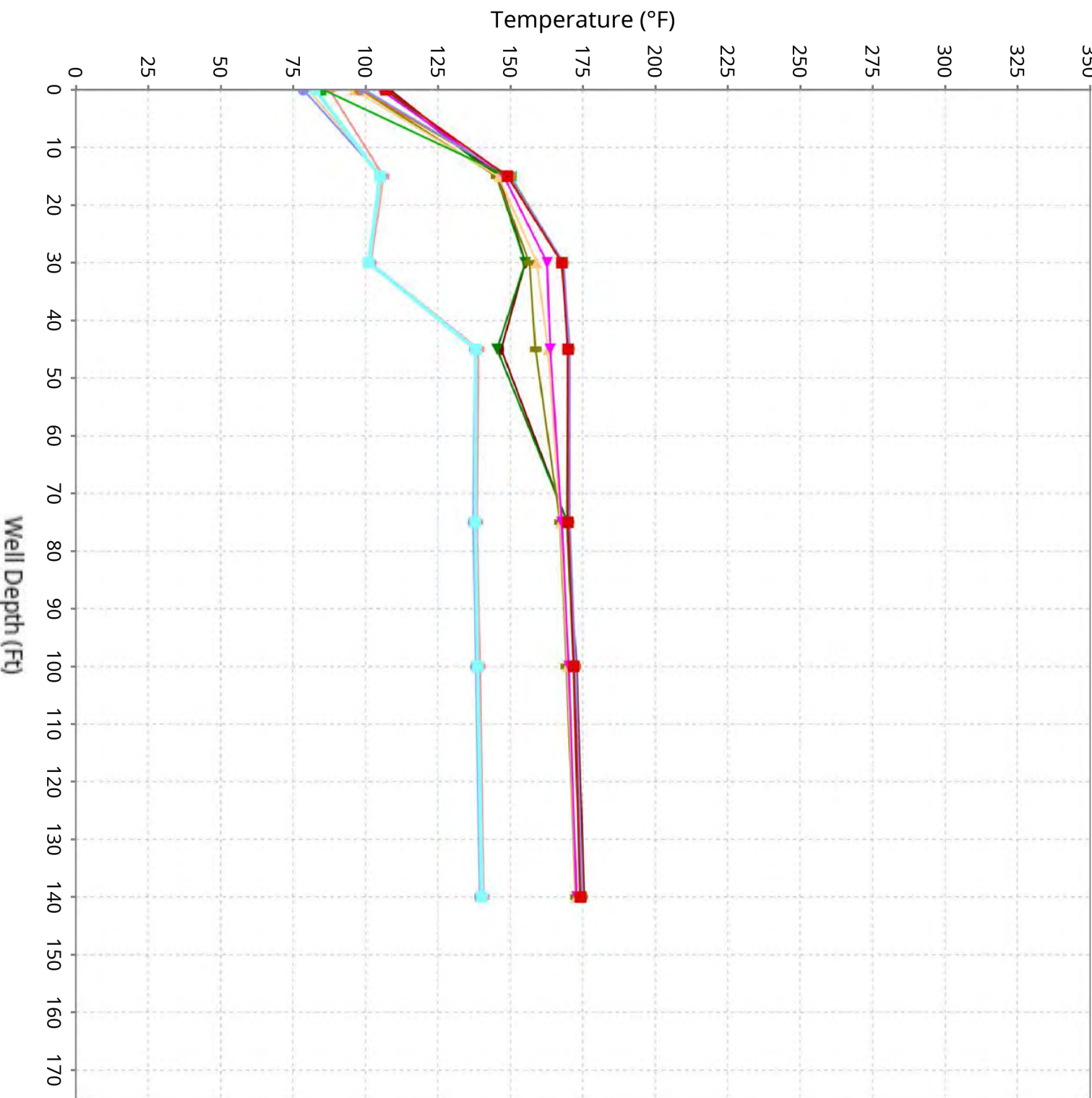
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-12

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



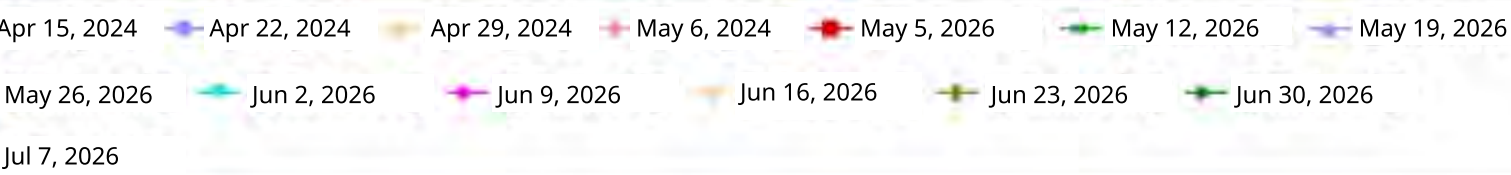
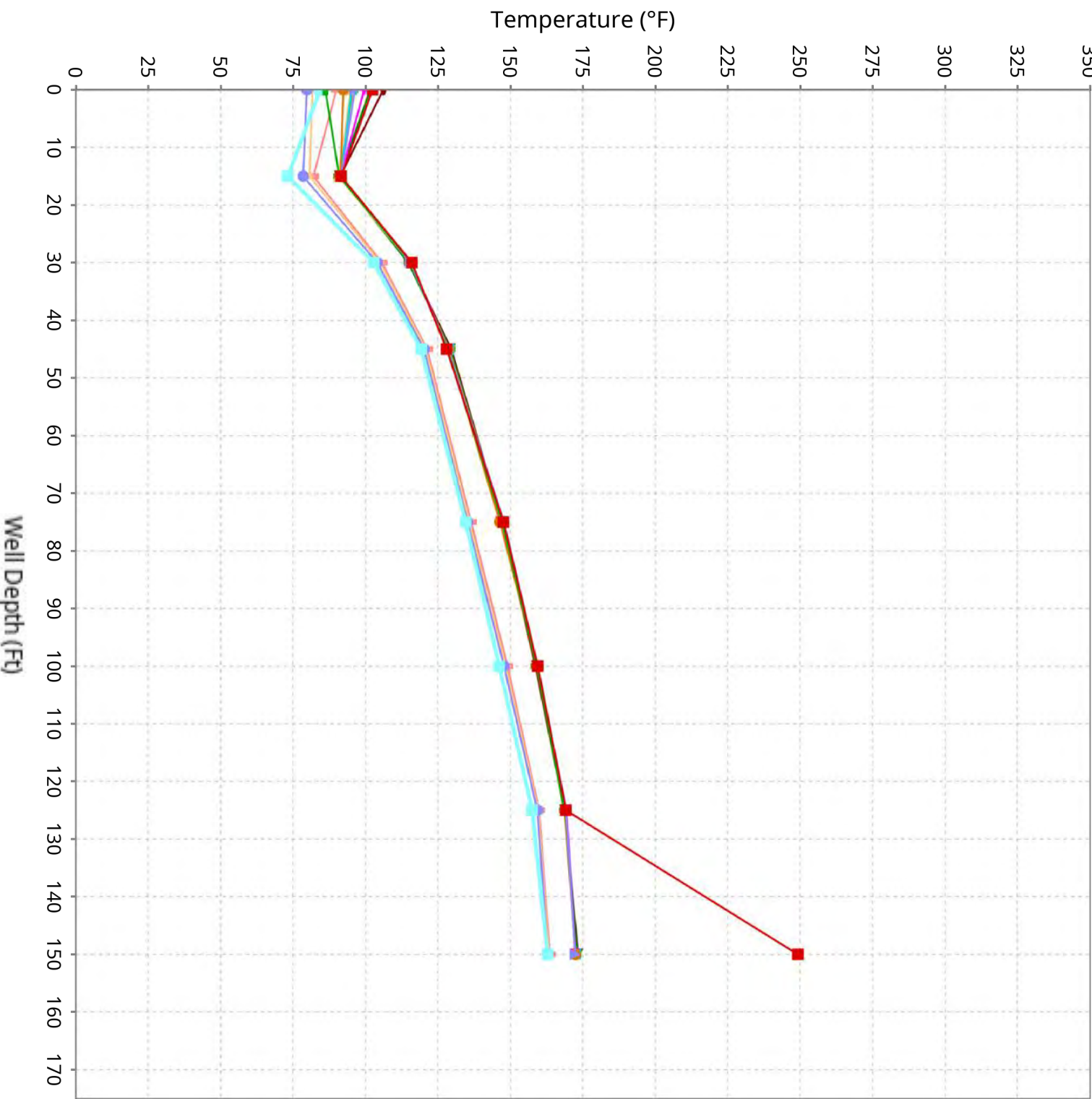
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-13

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



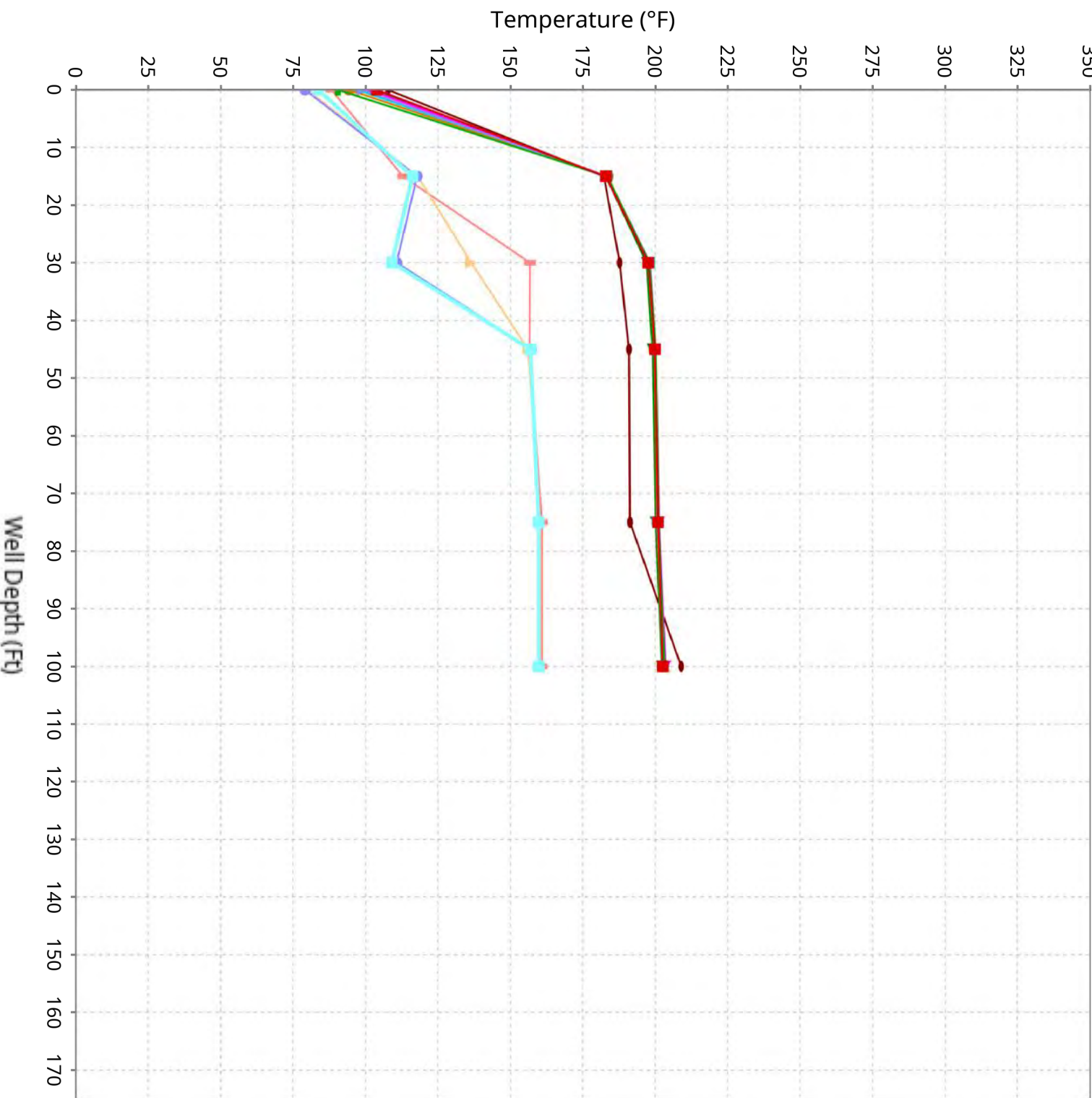
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-14

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



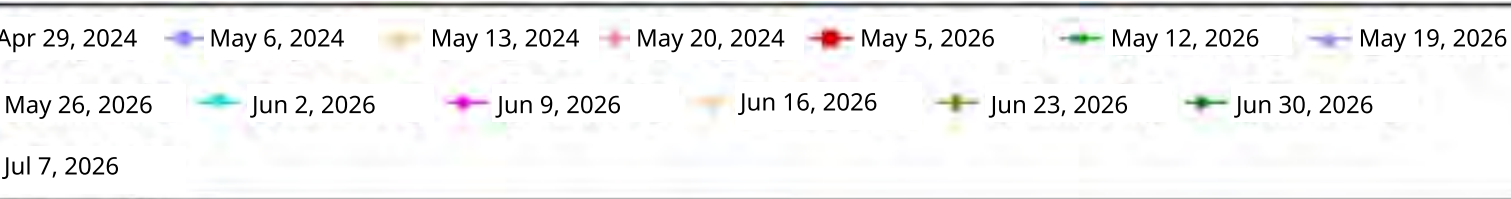
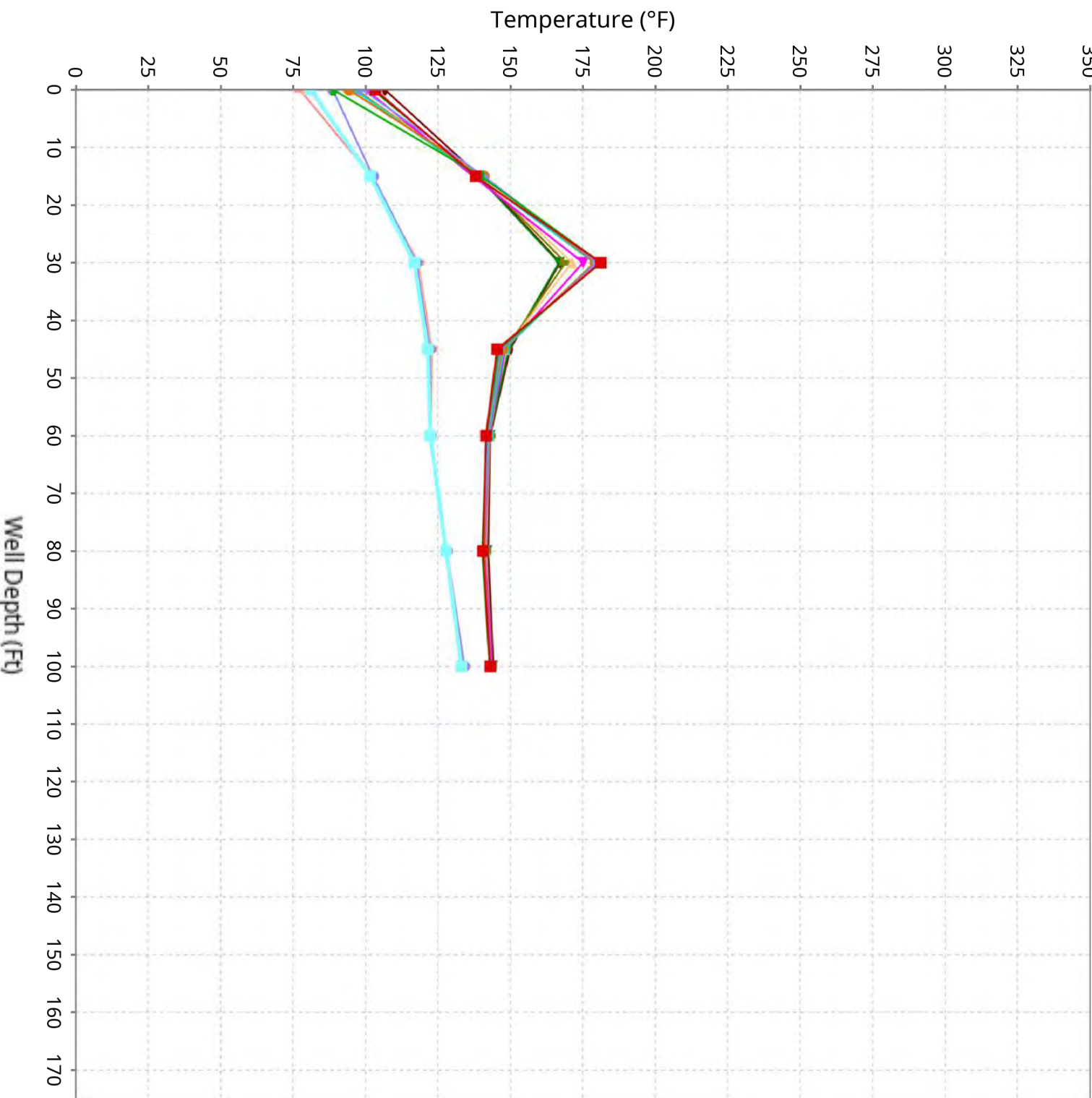
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-15

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



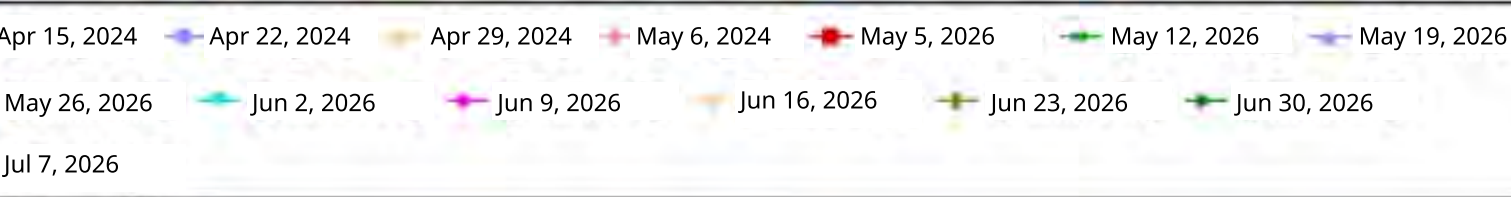
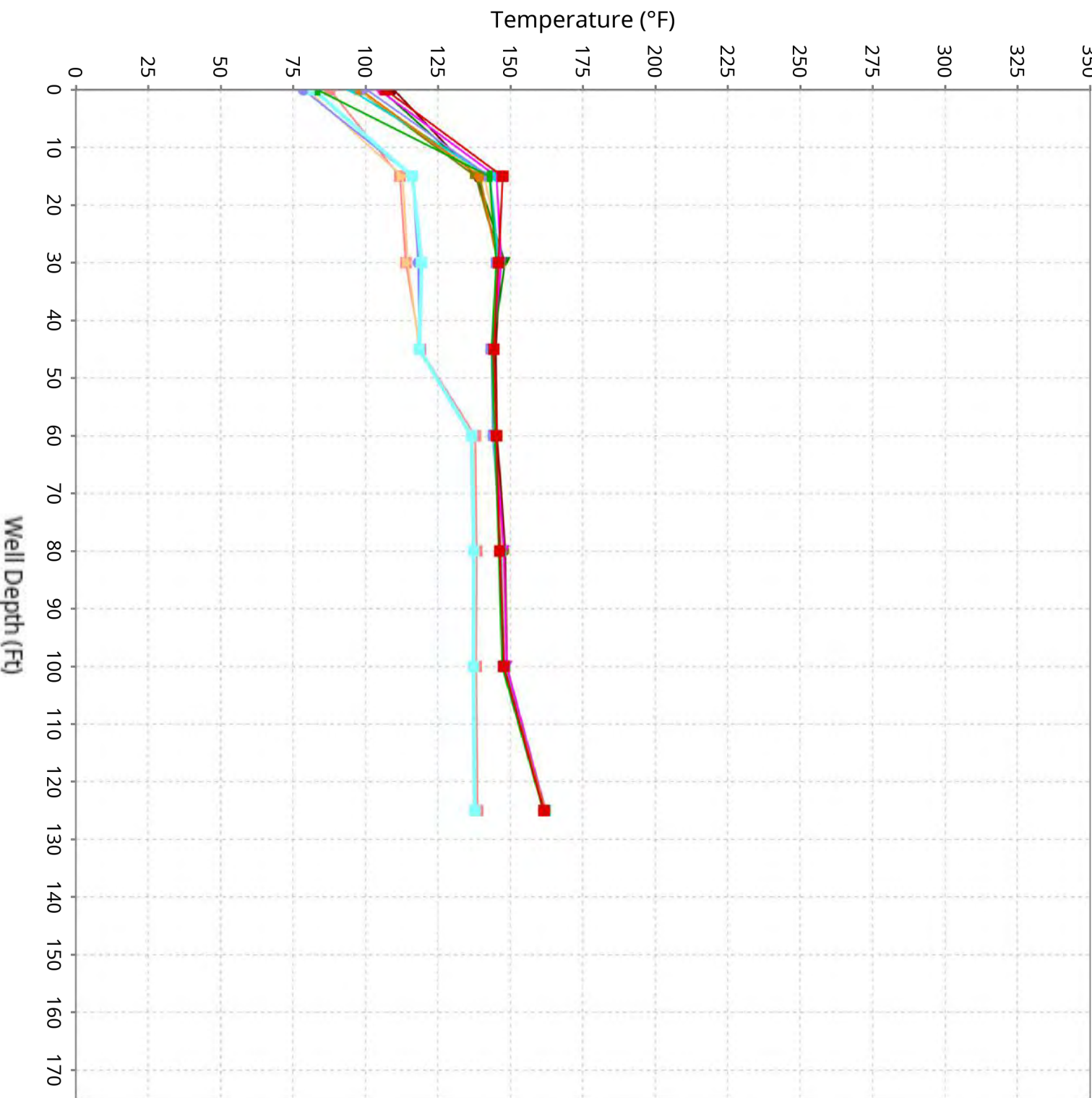
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-16

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



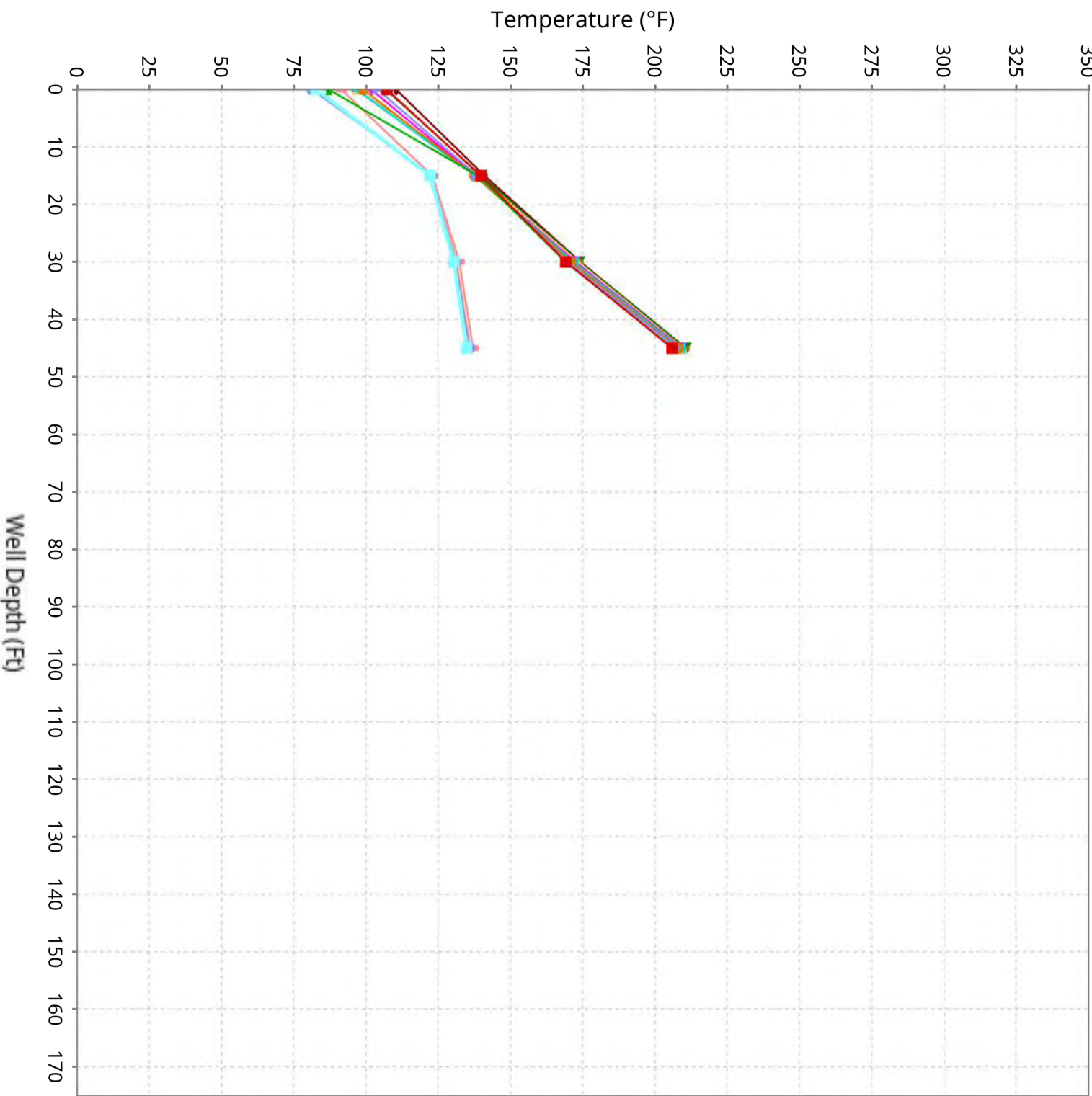
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-17

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-18

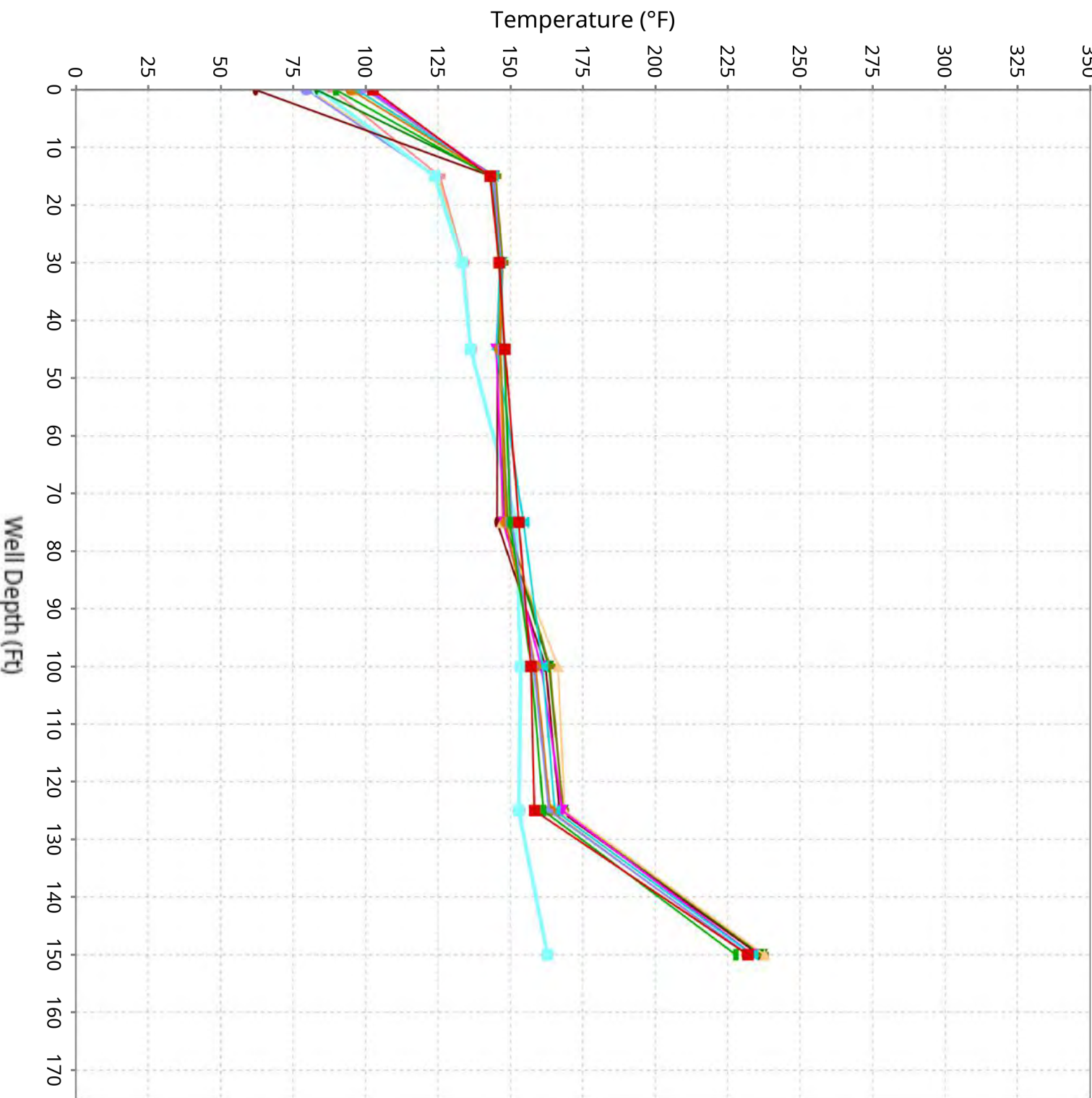
Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



- Apr 15, 2024
- Apr 22, 2024
- Apr 29, 2024
- May 6, 2024
- May 5, 2026
- May 12, 2026
- May 19, 2026
- May 26, 2026
- Jun 2, 2026
- Jun 9, 2026
- Jun 16, 2026
- Jun 23, 2026
- Jun 30, 2026
- Jul 7, 2026

Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-19

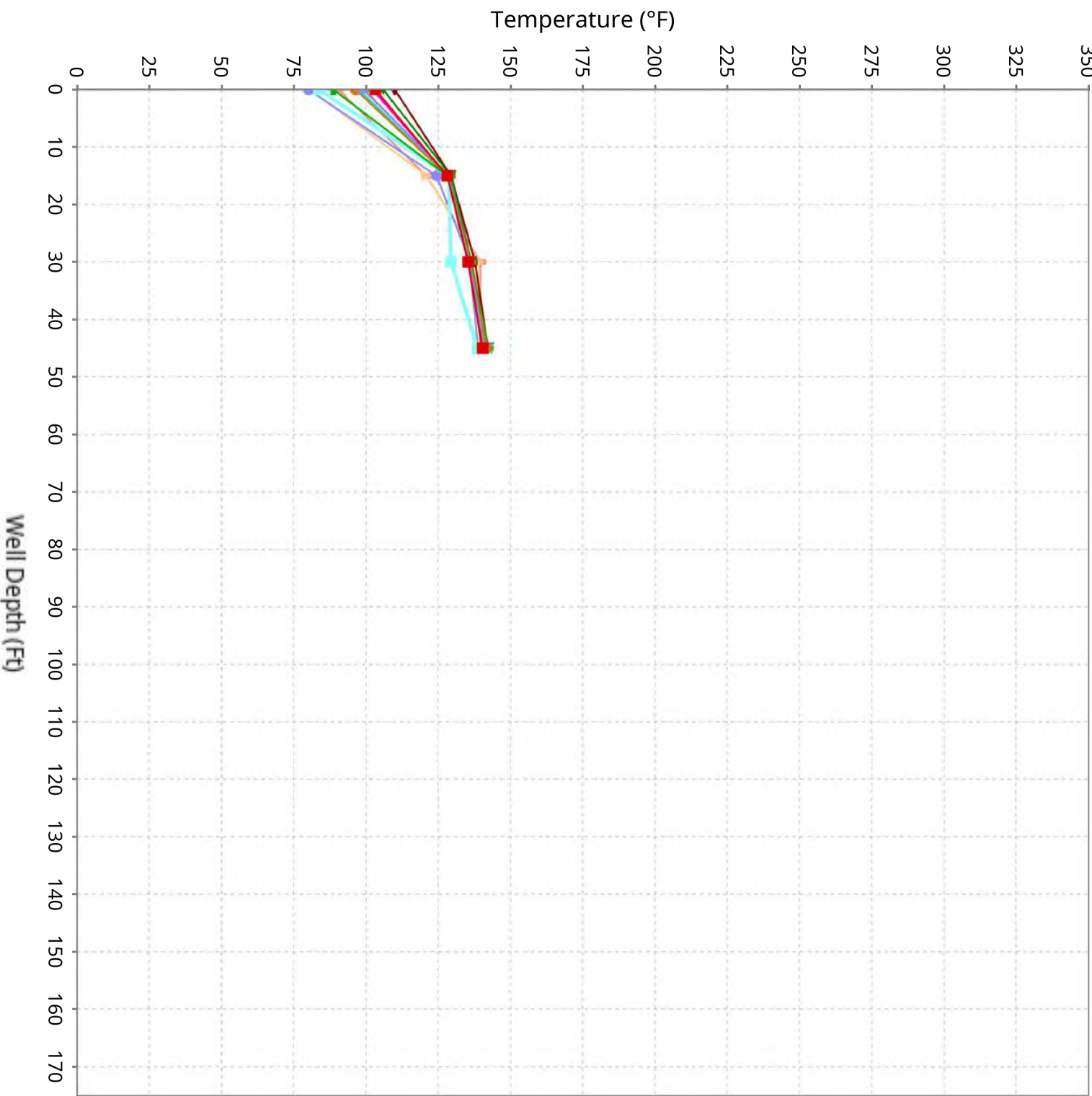
Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



- Apr 15, 2024
- Apr 22, 2024
- Apr 29, 2024
- May 6, 2024
- May 5, 2026
- May 12, 2026
- May 19, 2026
- May 26, 2026
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- Jun 16, 2026
- Jun 23, 2026
- Jun 30, 2026
- Jul 7, 2026

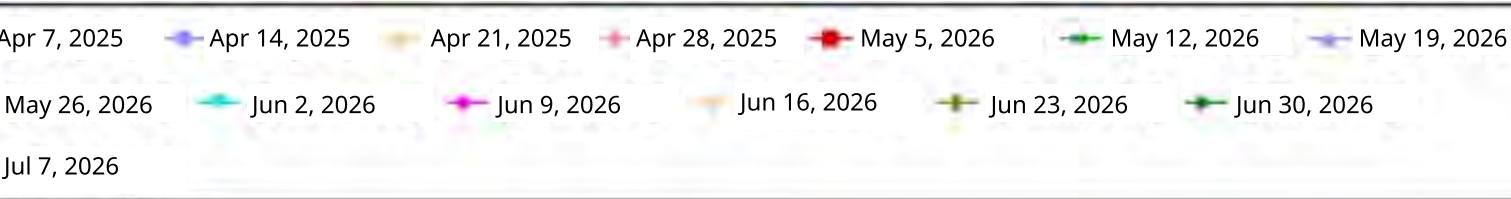
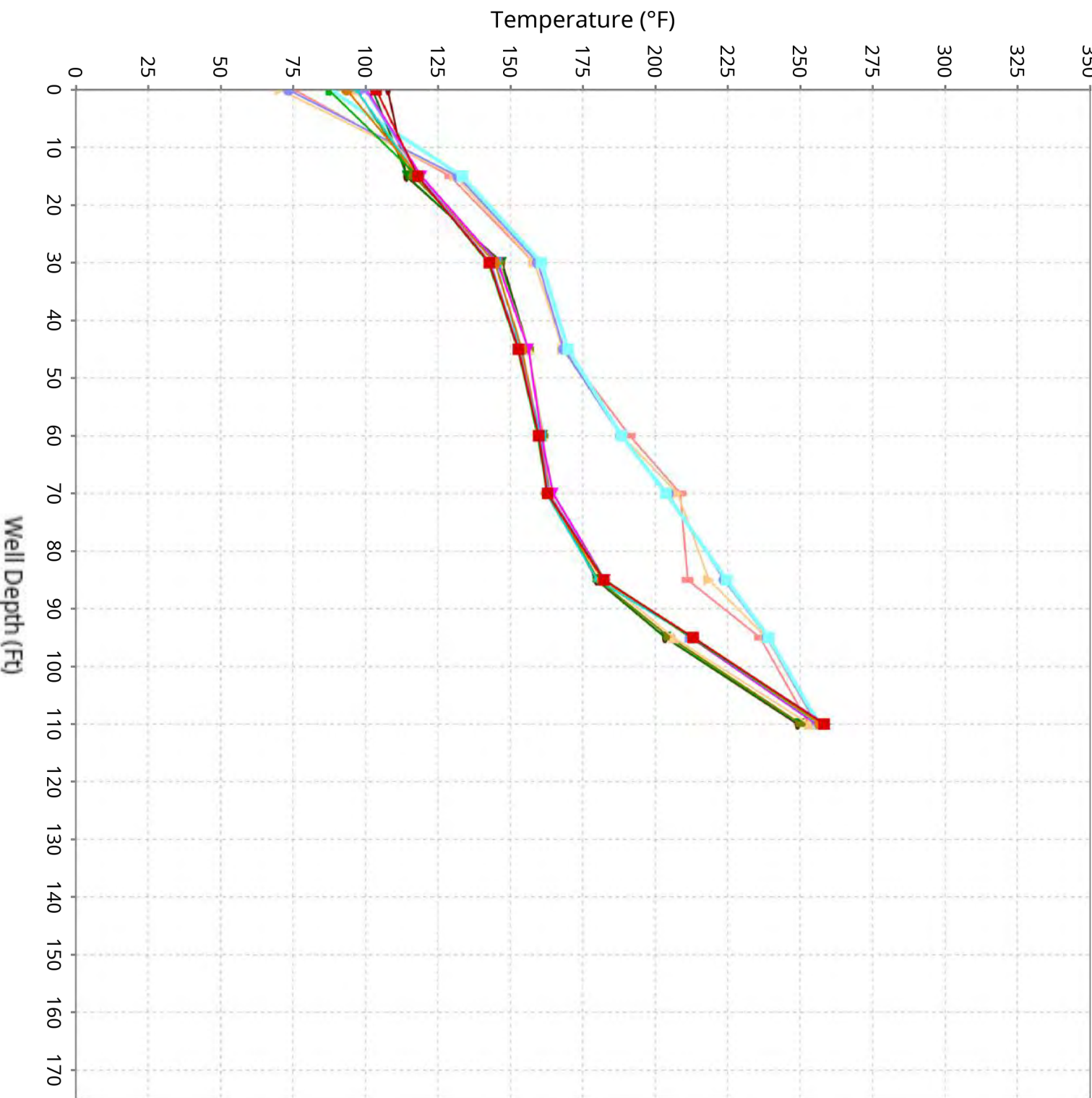
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-20

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



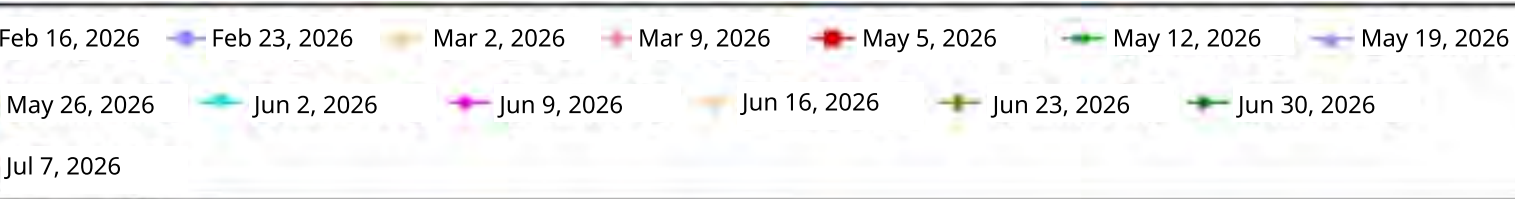
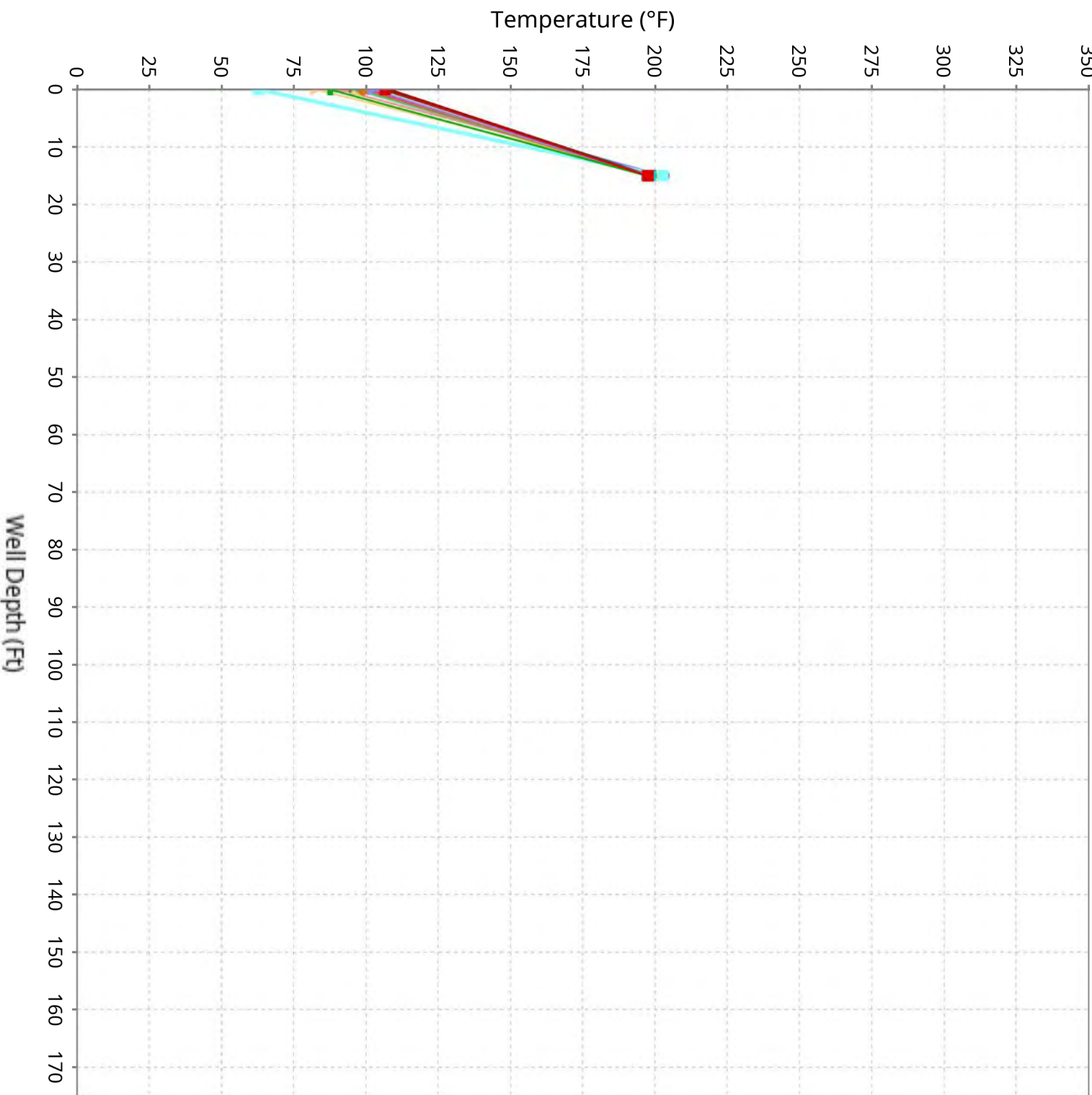
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-21

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



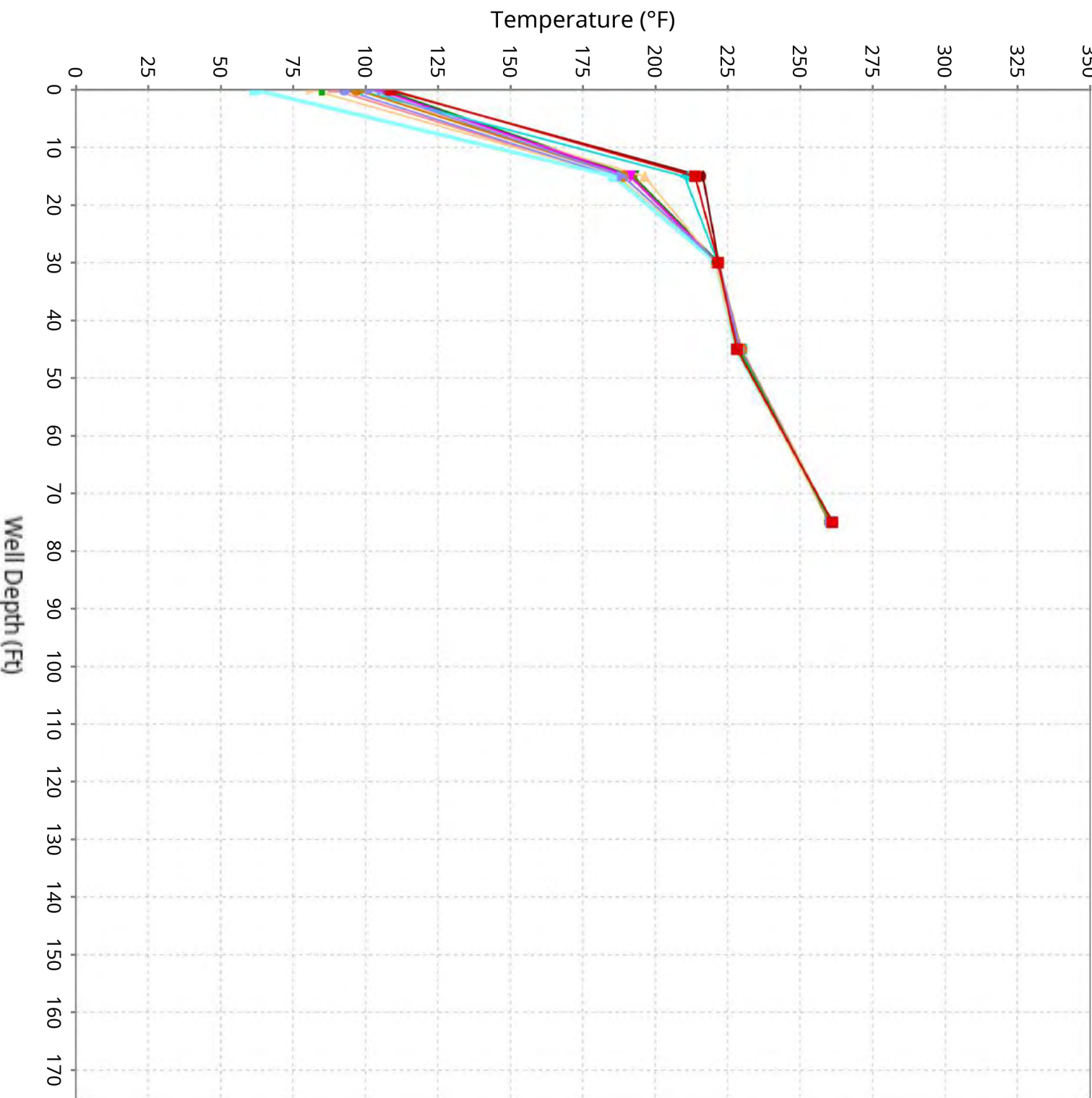
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-22

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



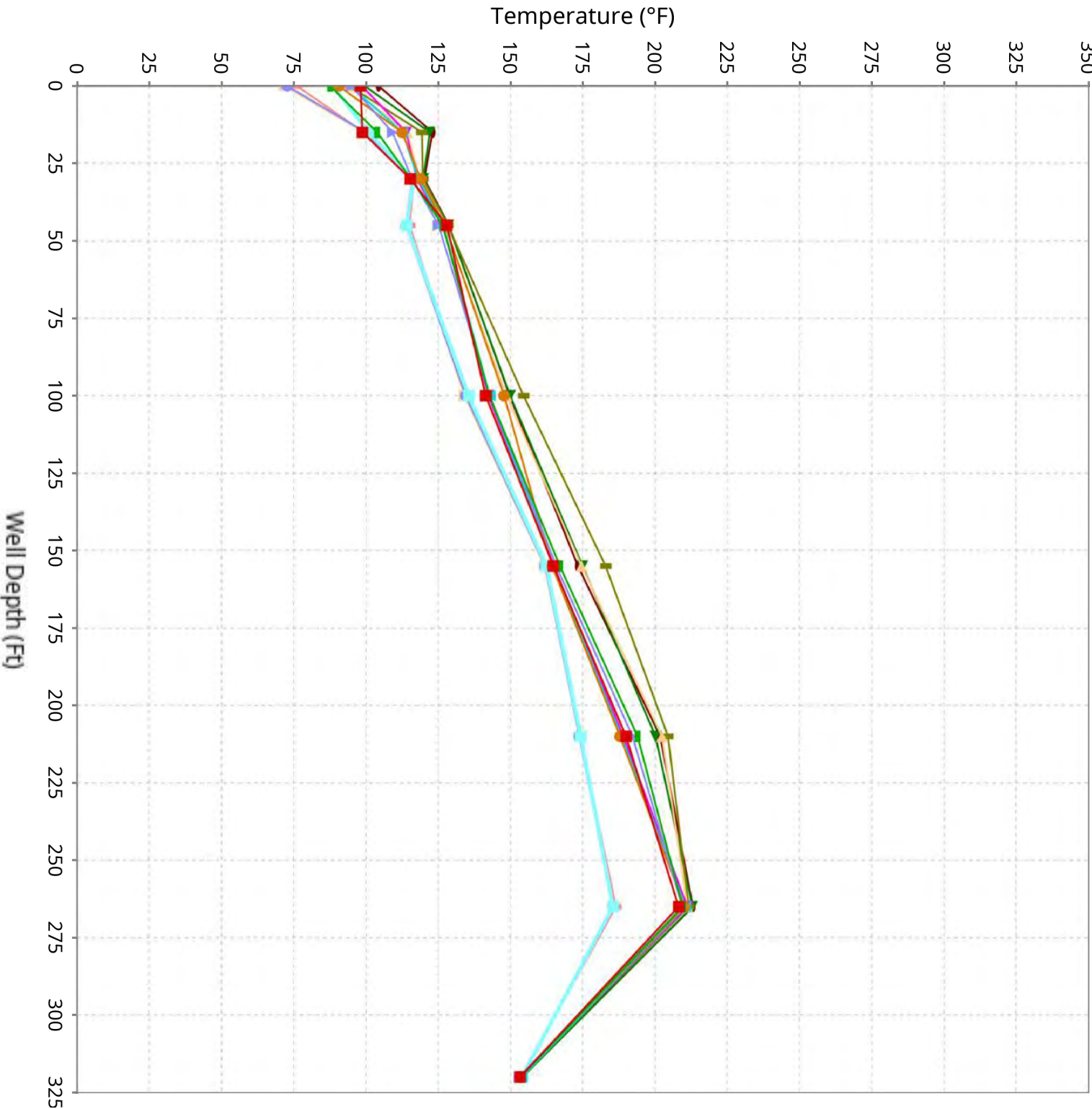
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-23

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



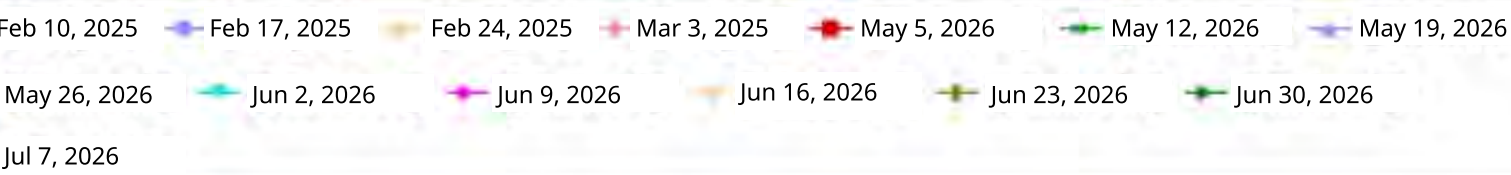
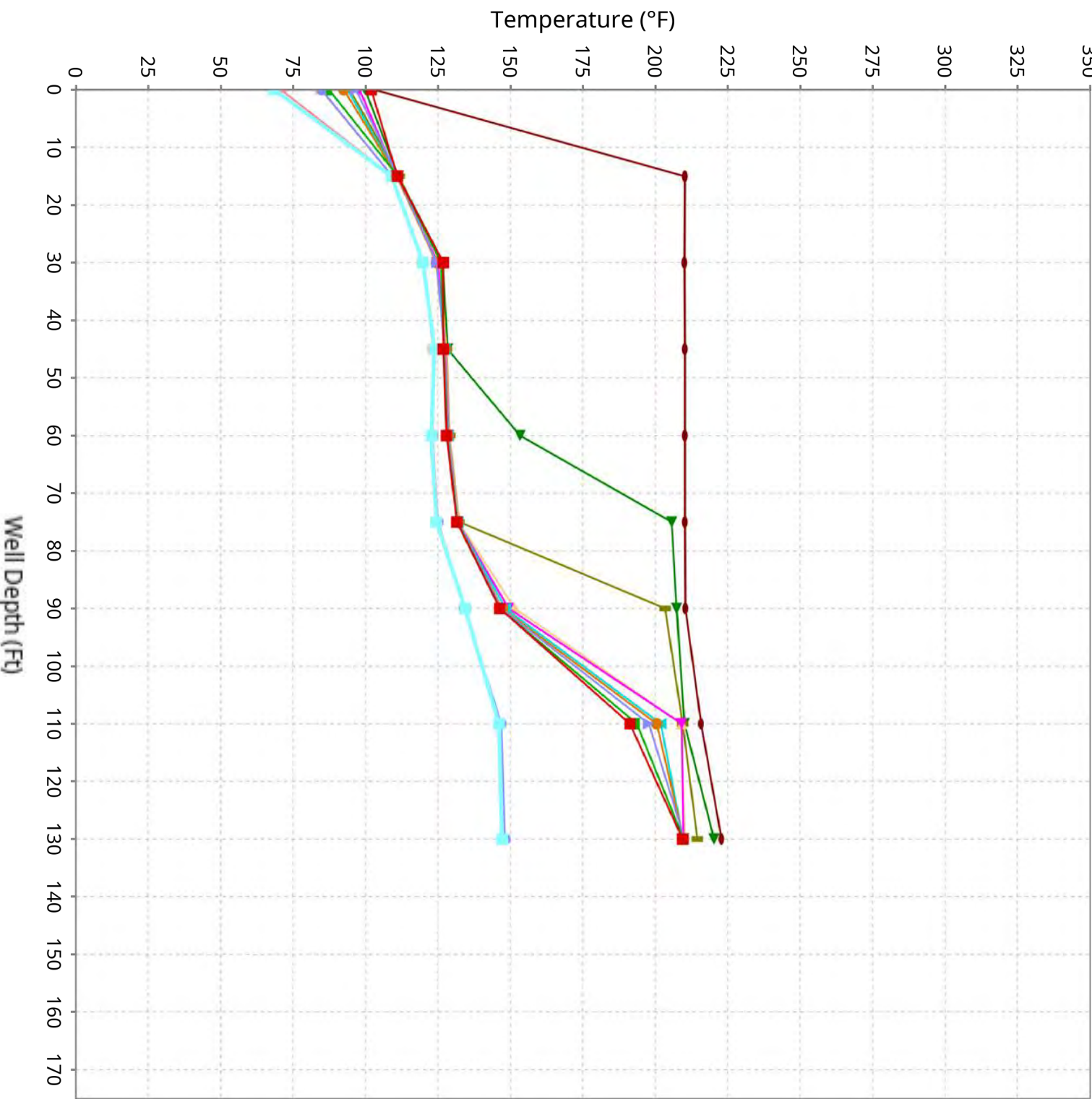
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-24

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



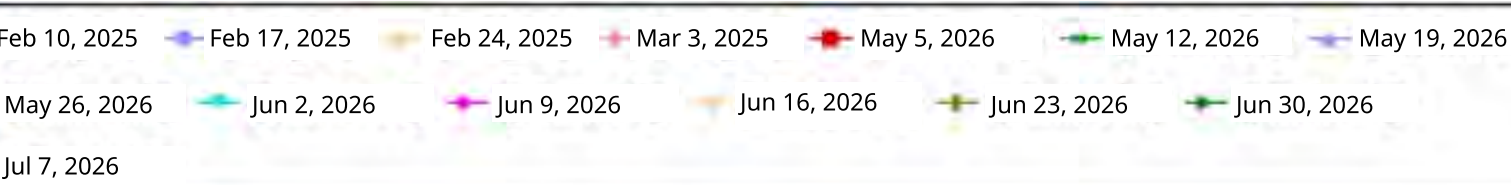
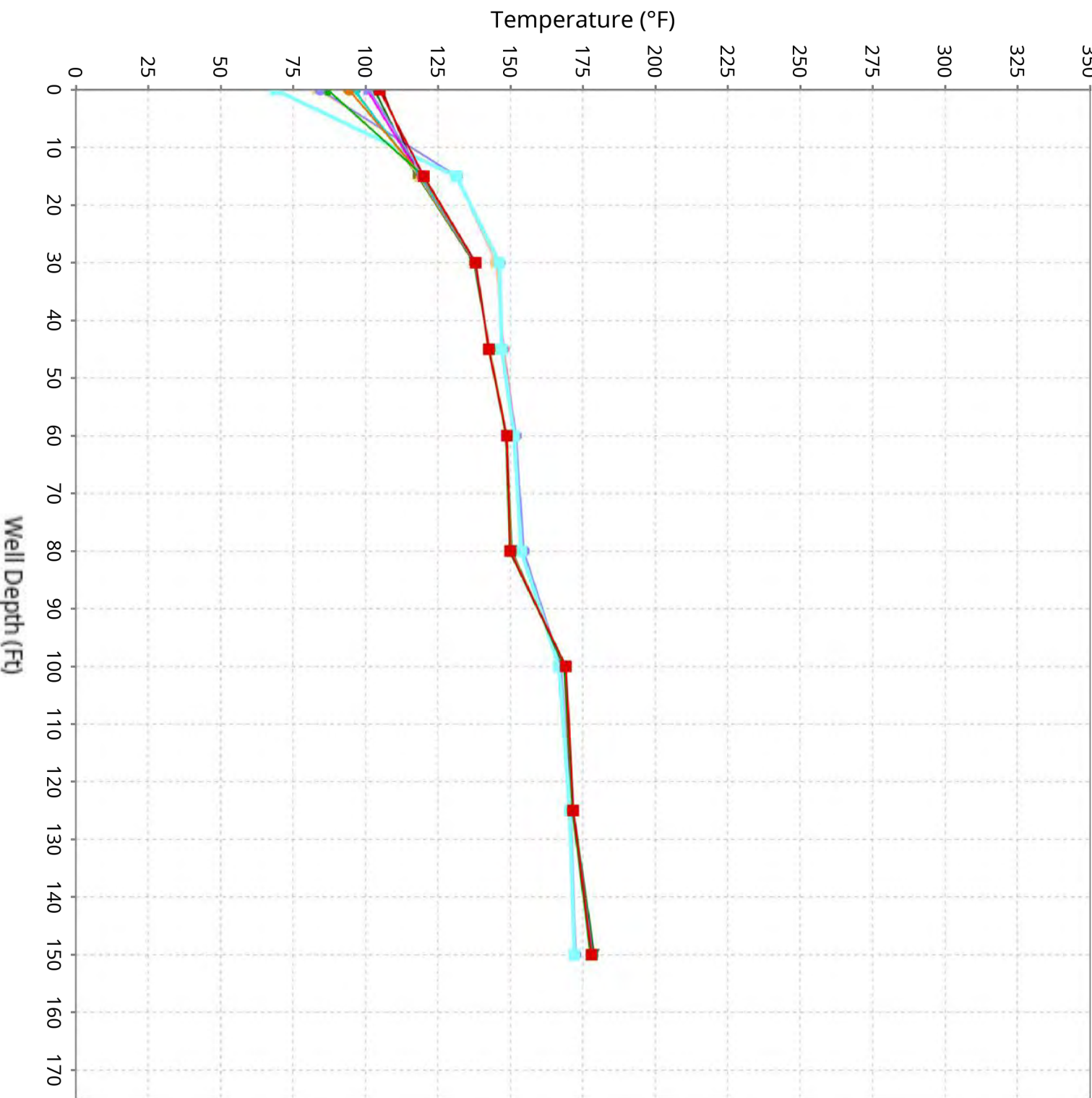
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-25

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



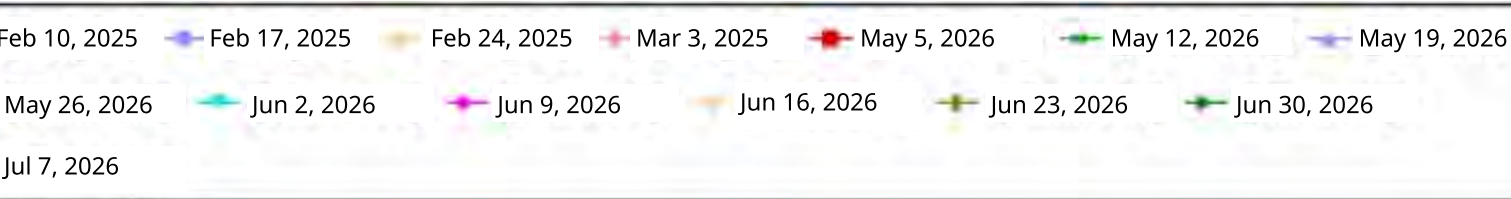
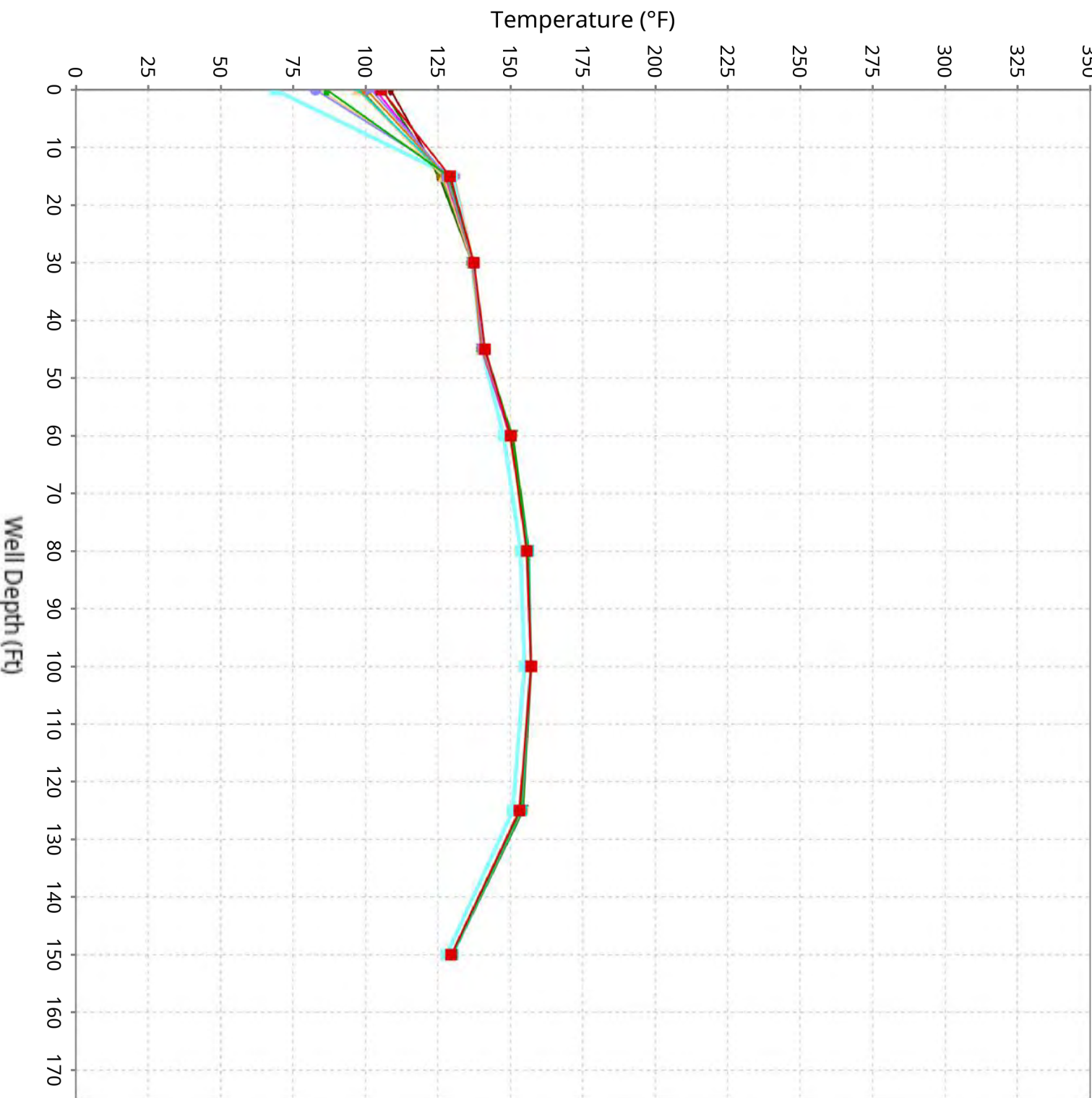
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-26

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



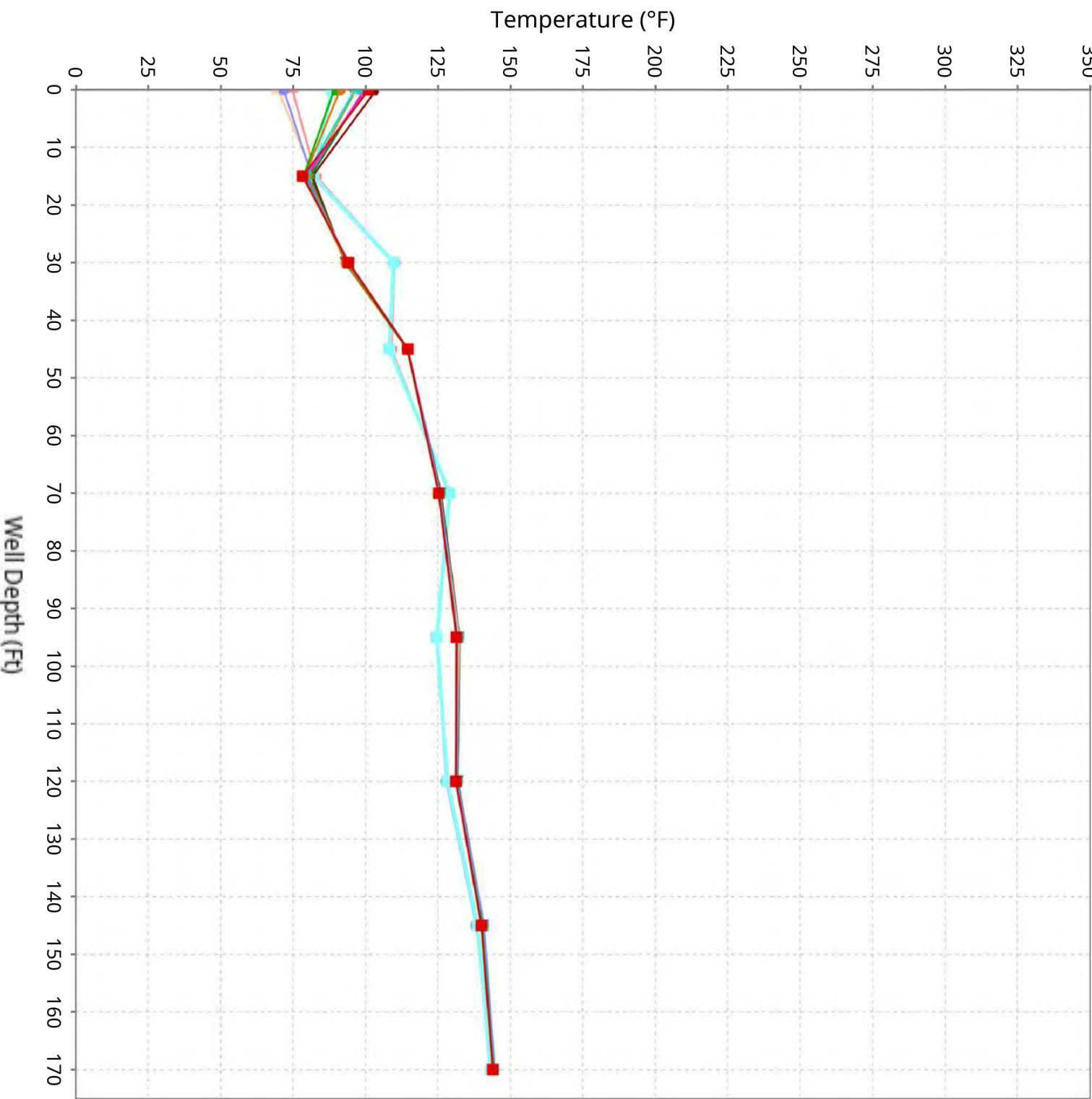
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-27

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-28

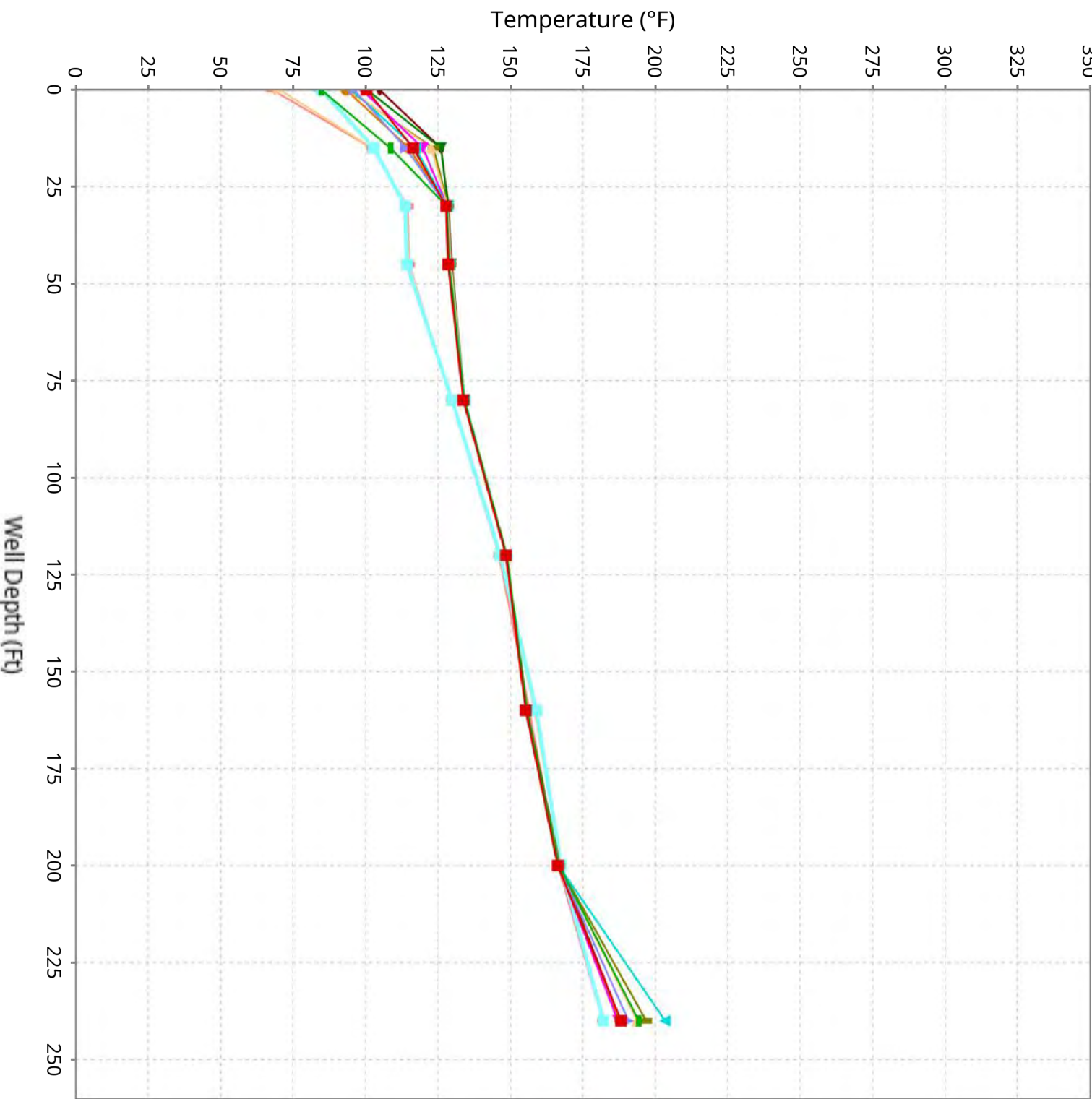
Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



- Apr 7, 2025
- Apr 14, 2025
- Apr 21, 2025
- Apr 28, 2025
- May 5, 2026
- May 12, 2026
- May 19, 2026
- May 26, 2026
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- Jun 16, 2026
- Jun 23, 2026
- Jun 30, 2026
- Jul 7, 2026

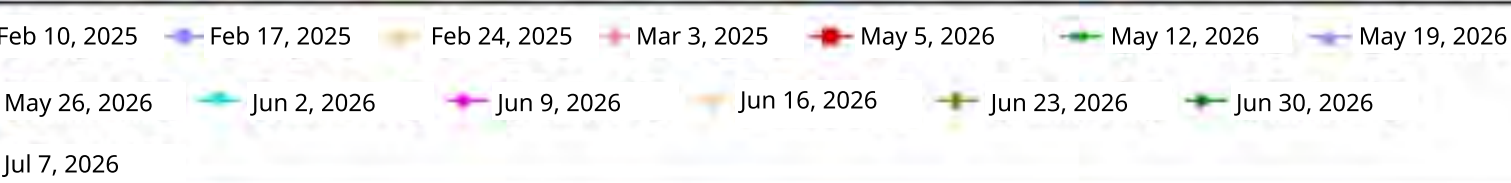
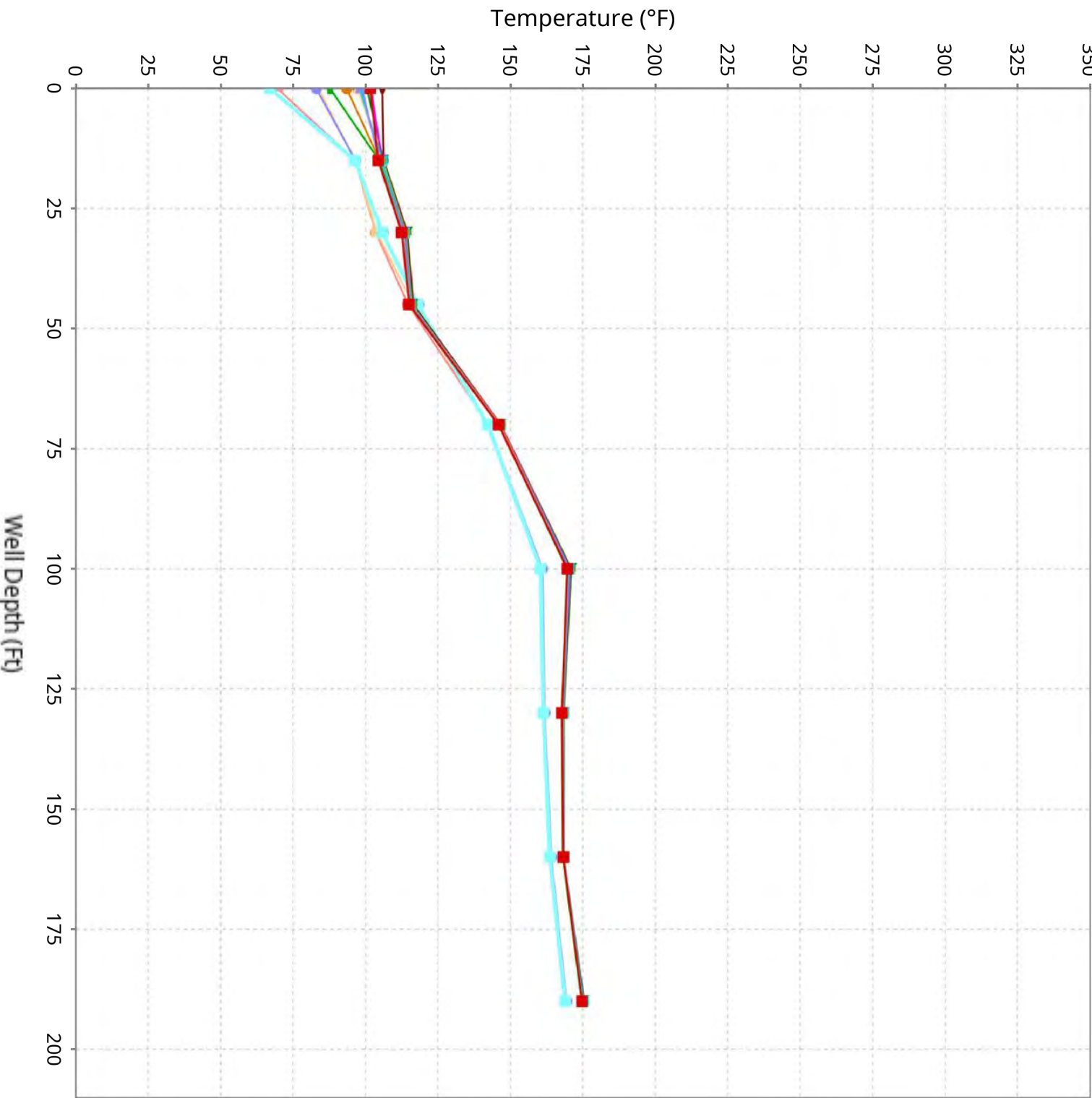
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-29

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



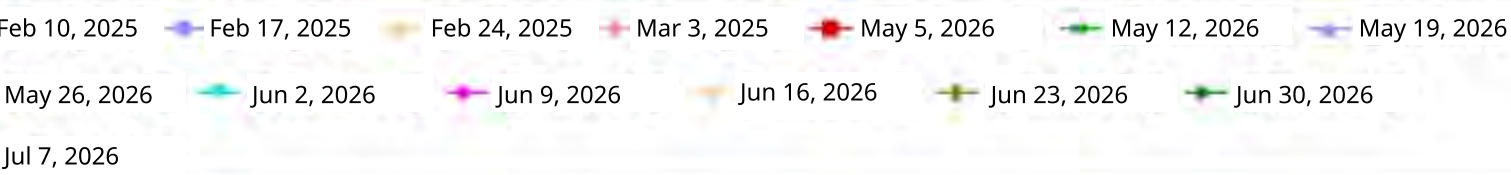
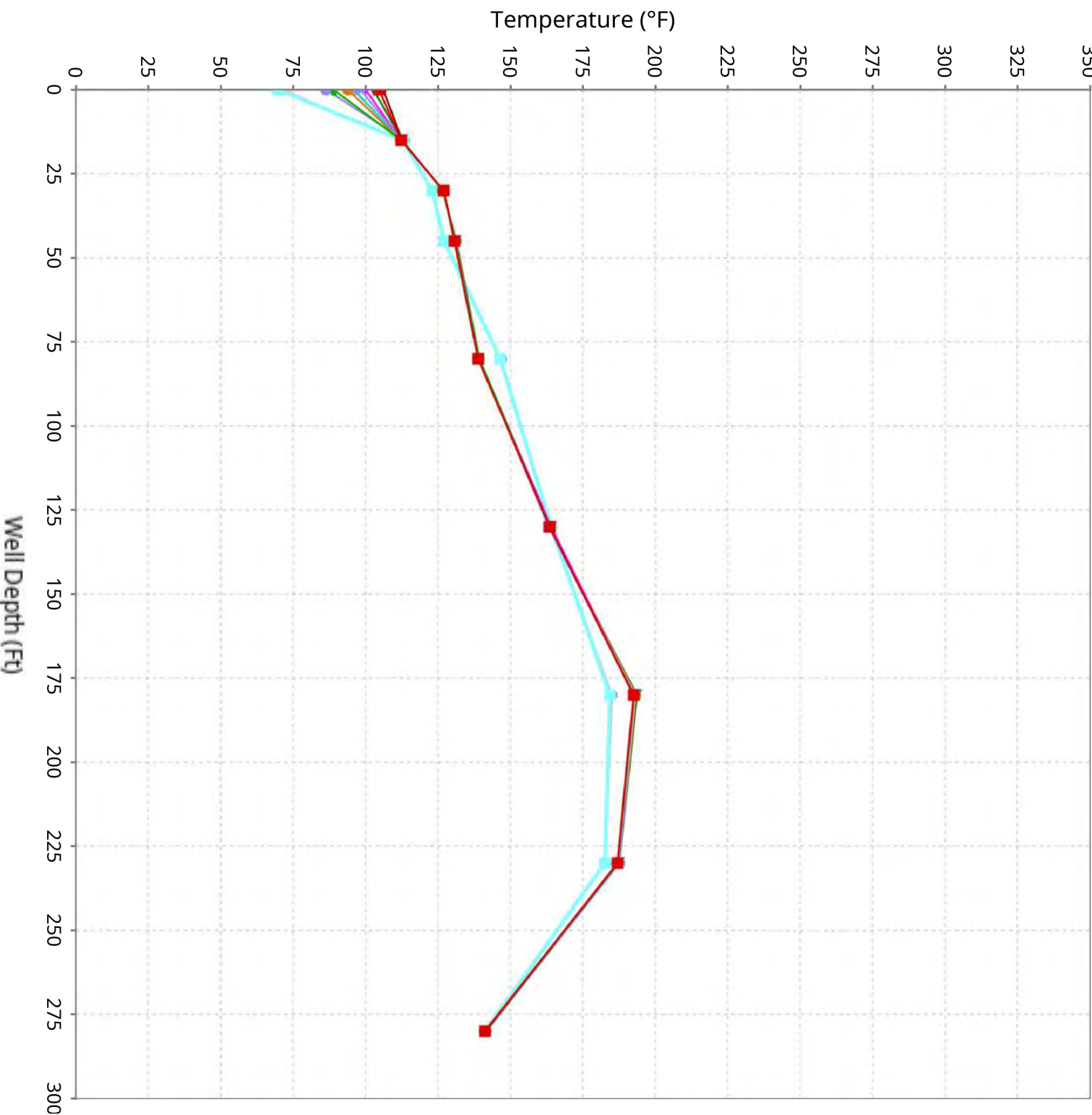
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-30

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



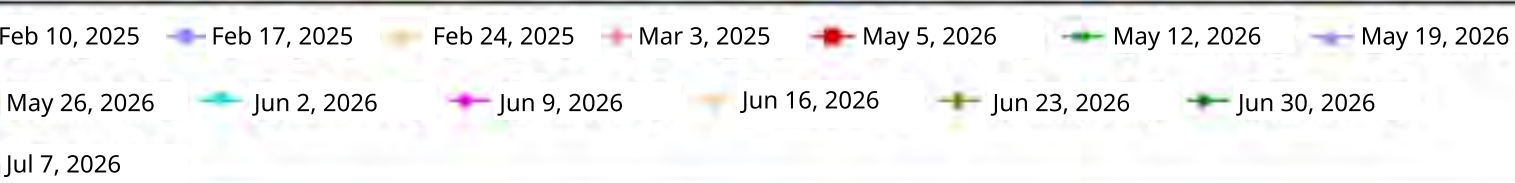
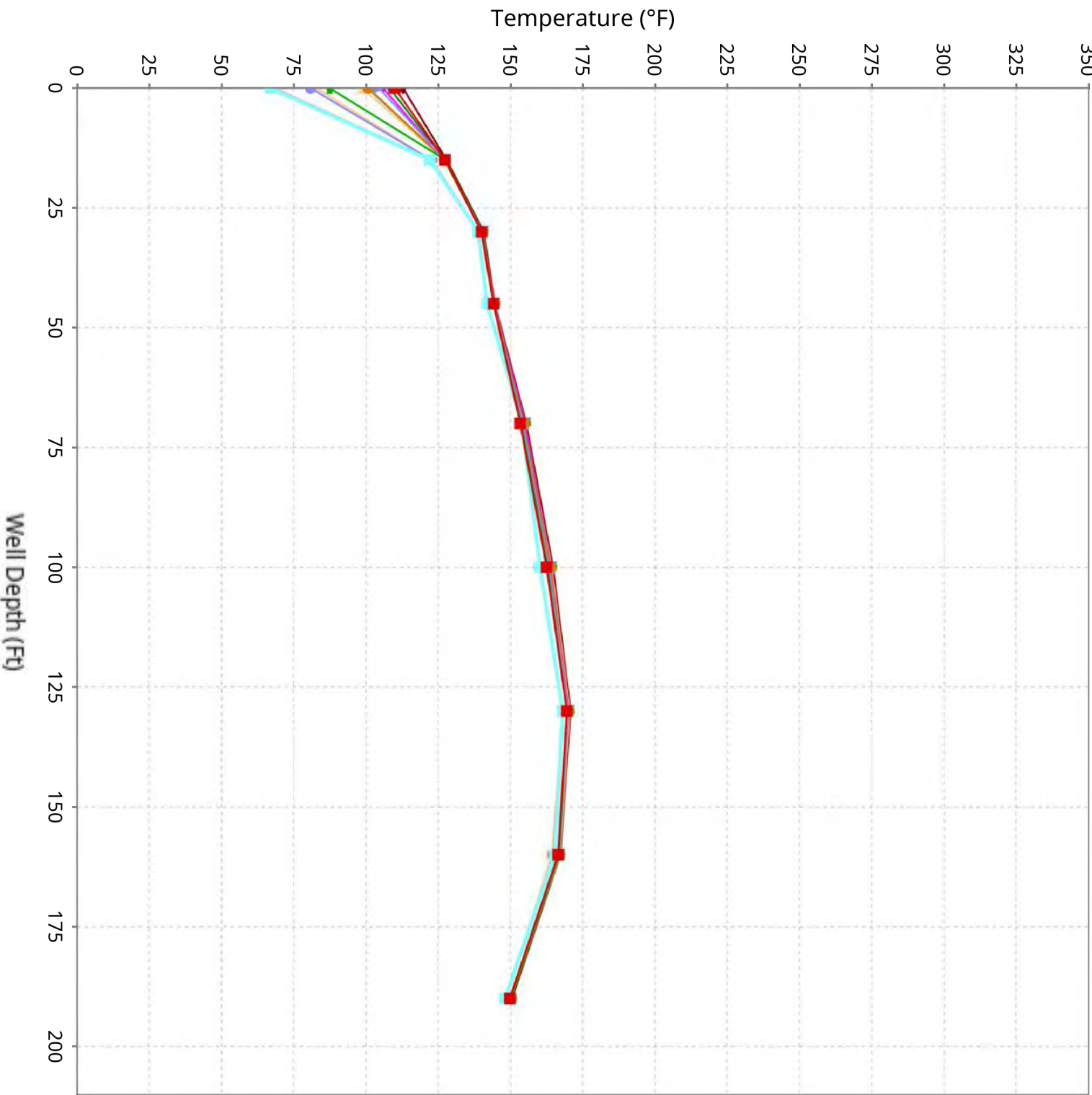
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-31

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



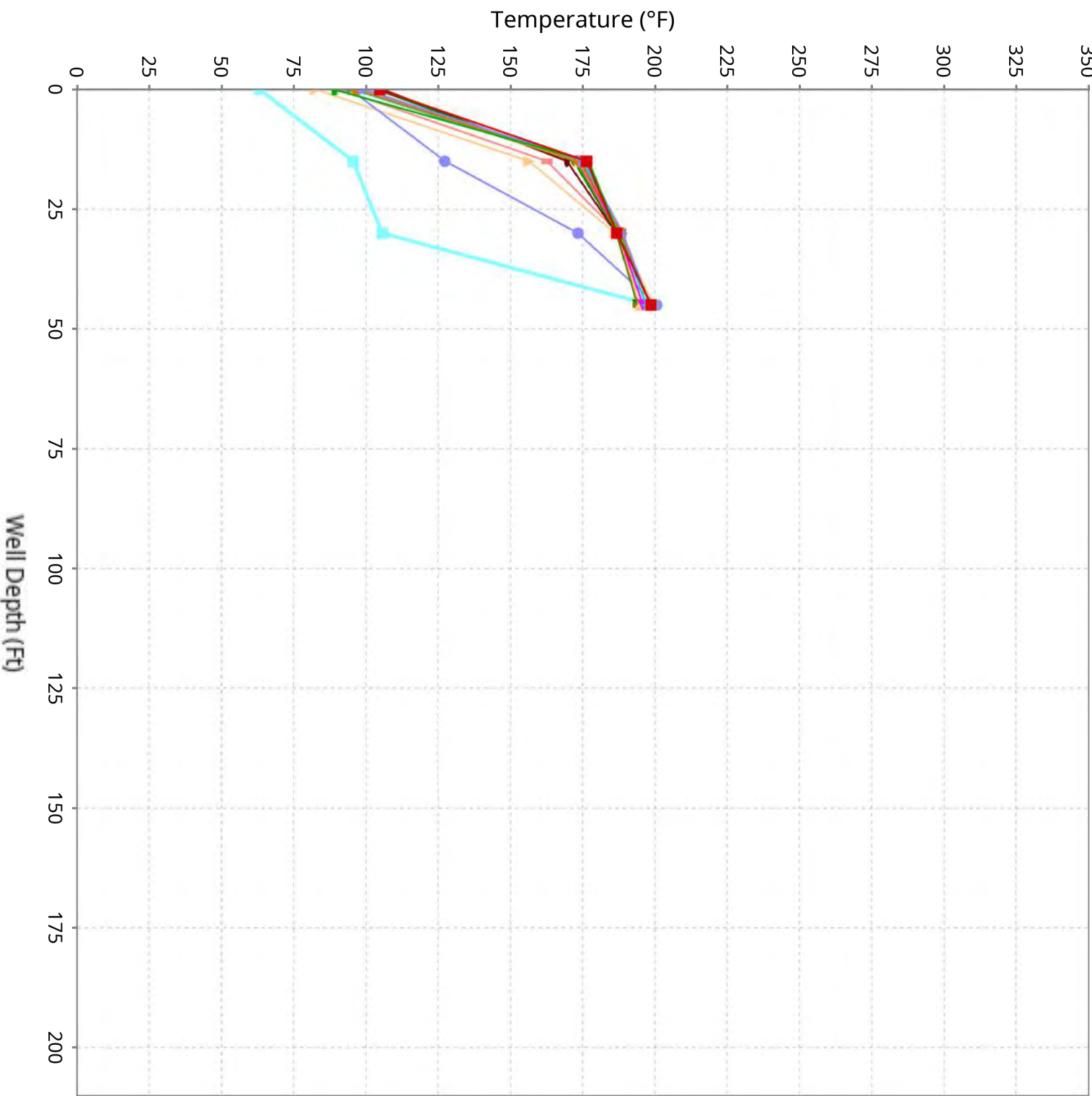
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-32

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



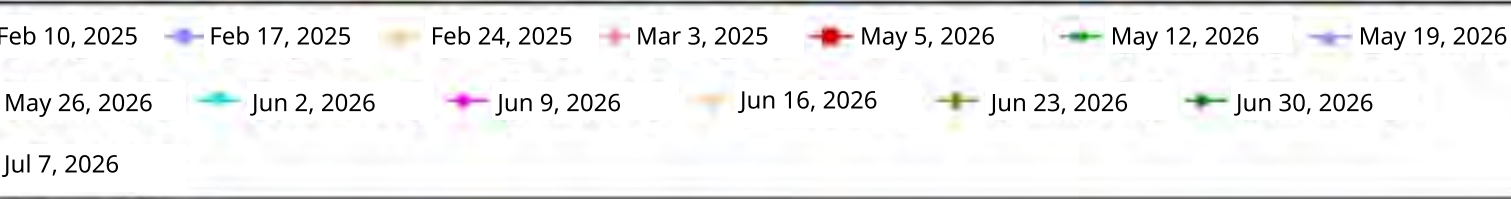
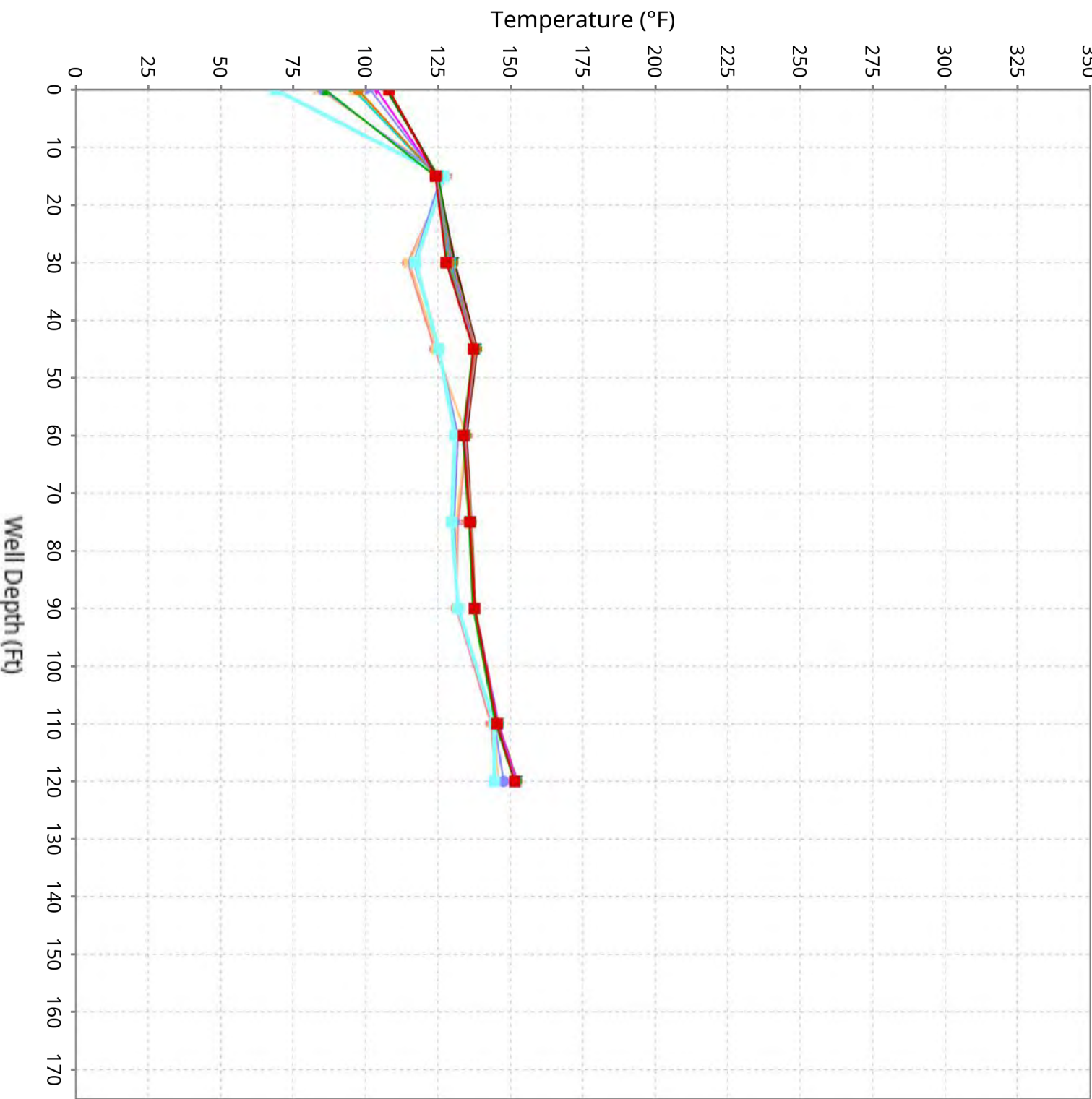
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-33

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



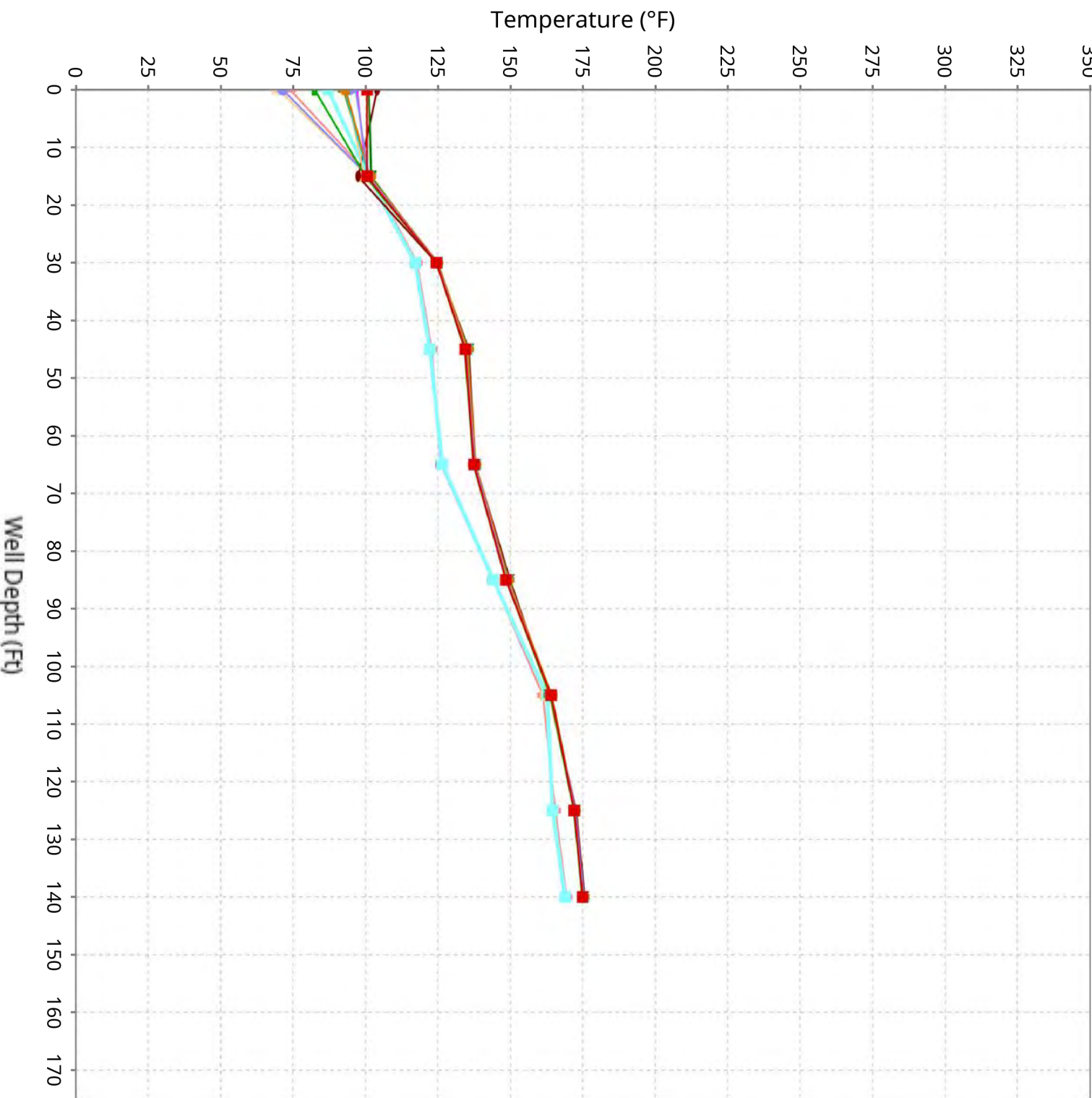
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-34

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-35

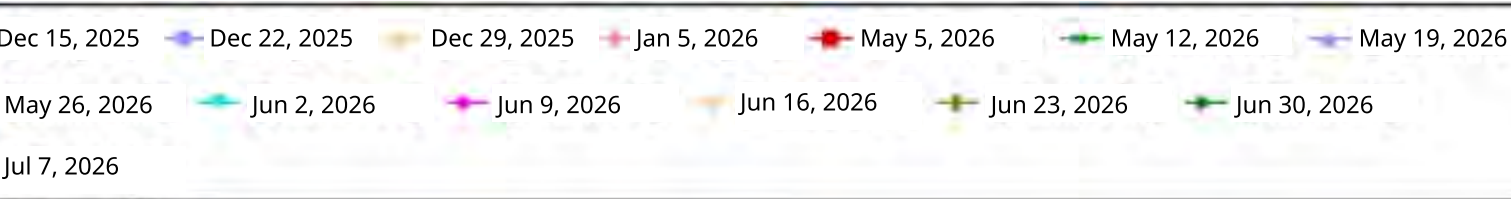
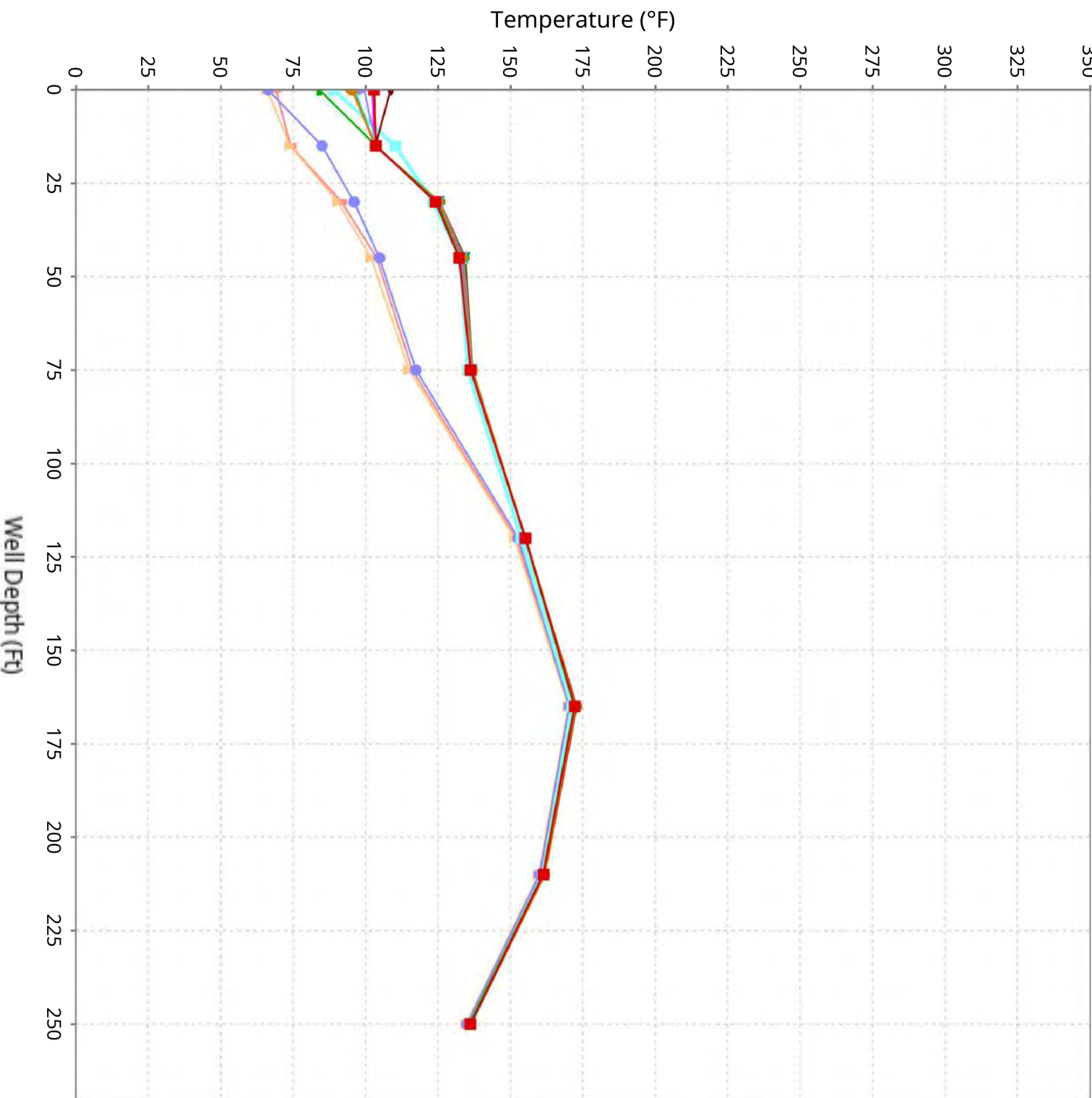
Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



- Apr 7, 2025
- Apr 14, 2025
- Apr 21, 2025
- Apr 28, 2025
- May 5, 2026
- May 12, 2026
- May 19, 2026
- May 26, 2026
- Jun 2, 2026
- Jun 9, 2026
- Jun 16, 2026
- Jun 23, 2026
- Jun 30, 2026
- Jul 7, 2026

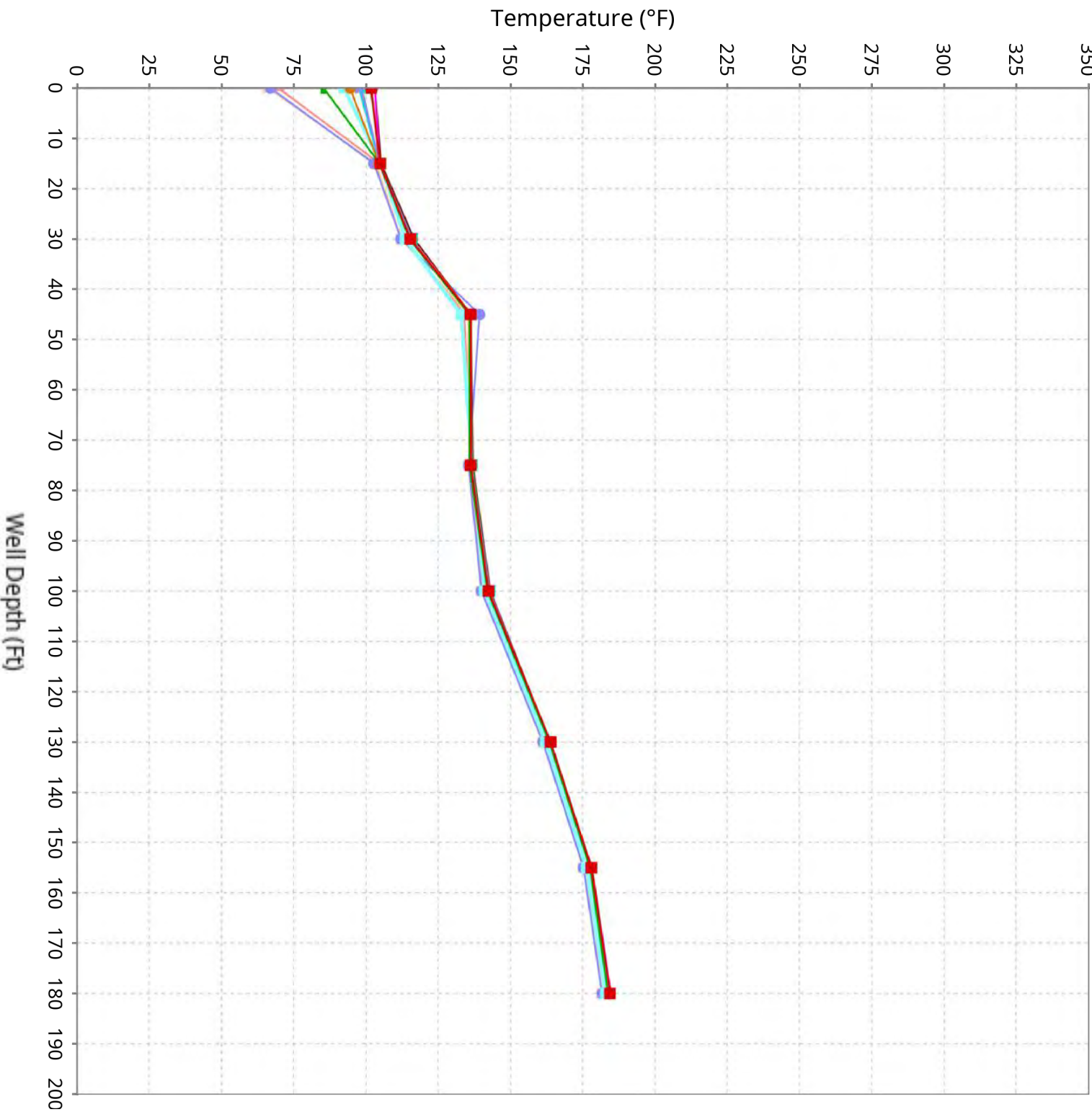
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-36

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



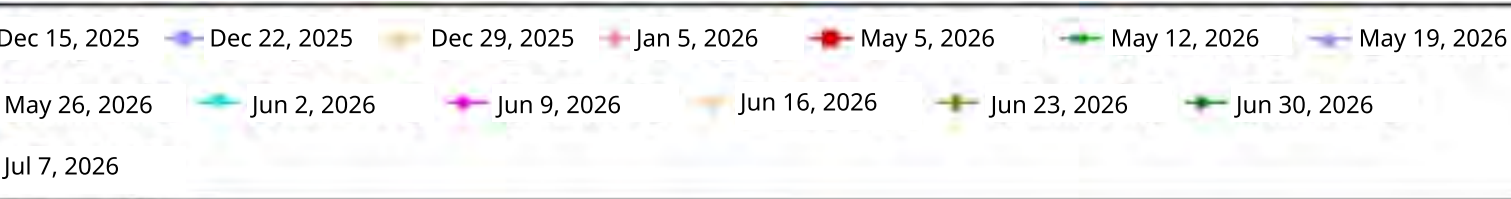
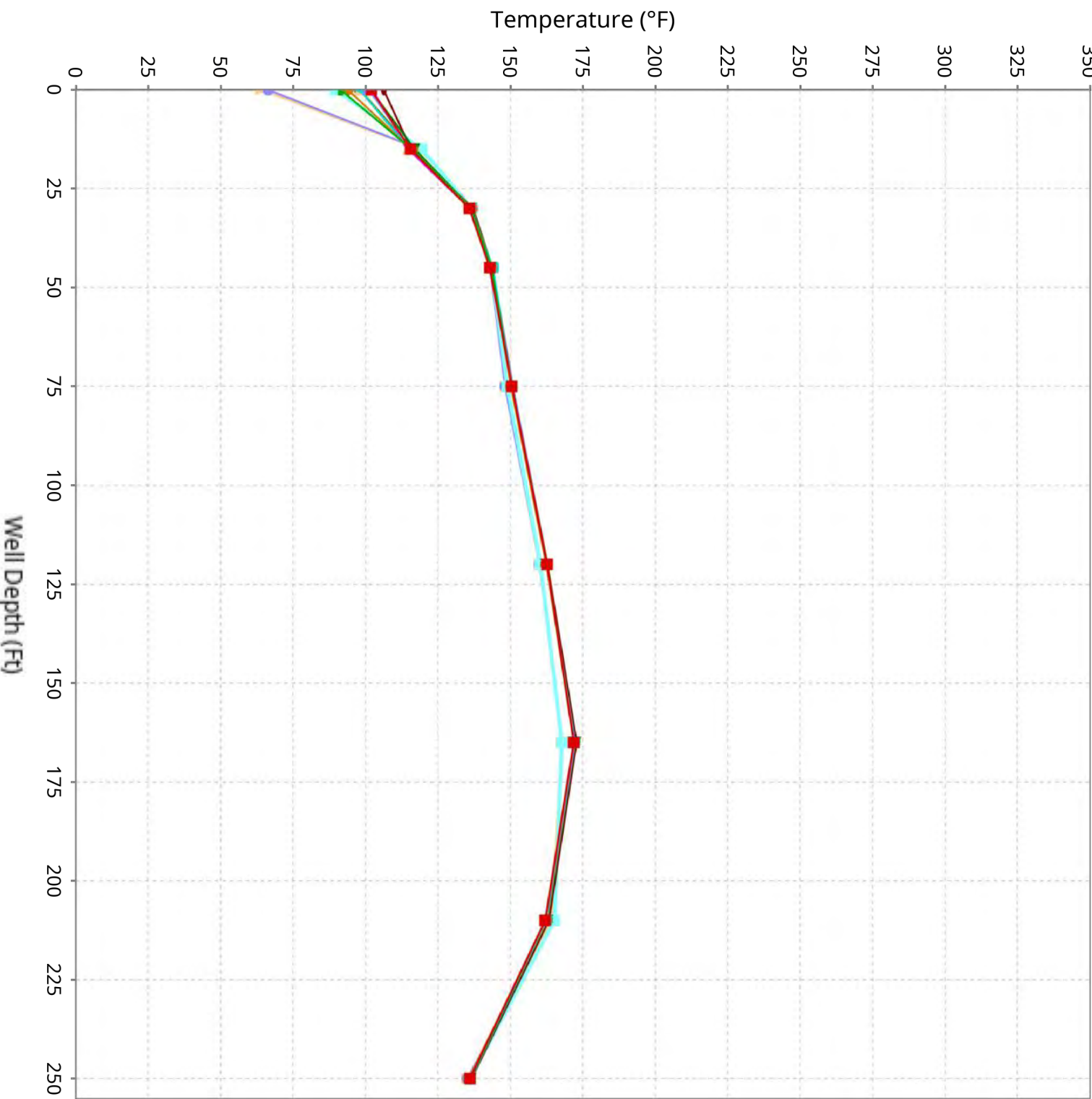
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-37

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



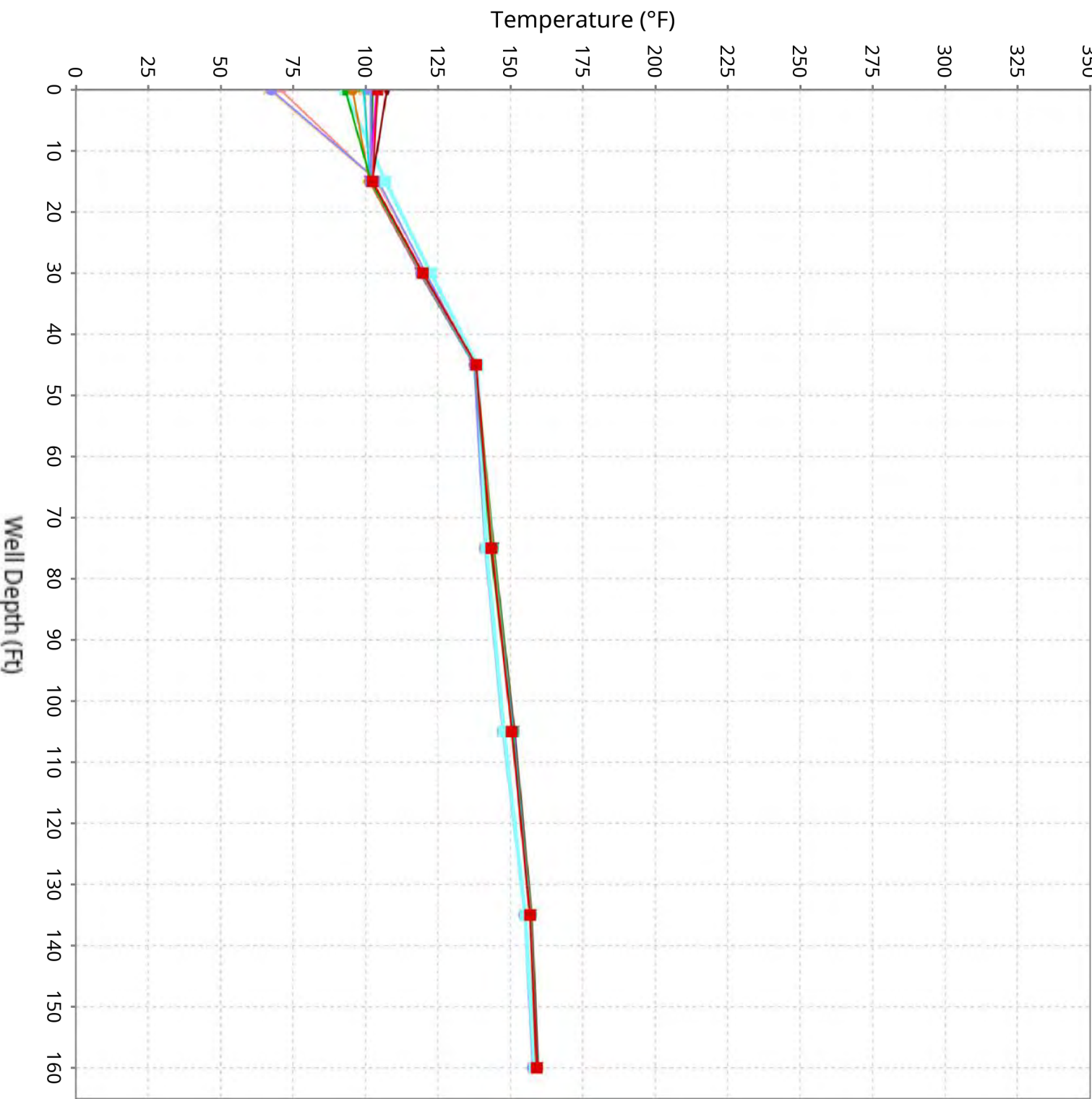
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-38

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



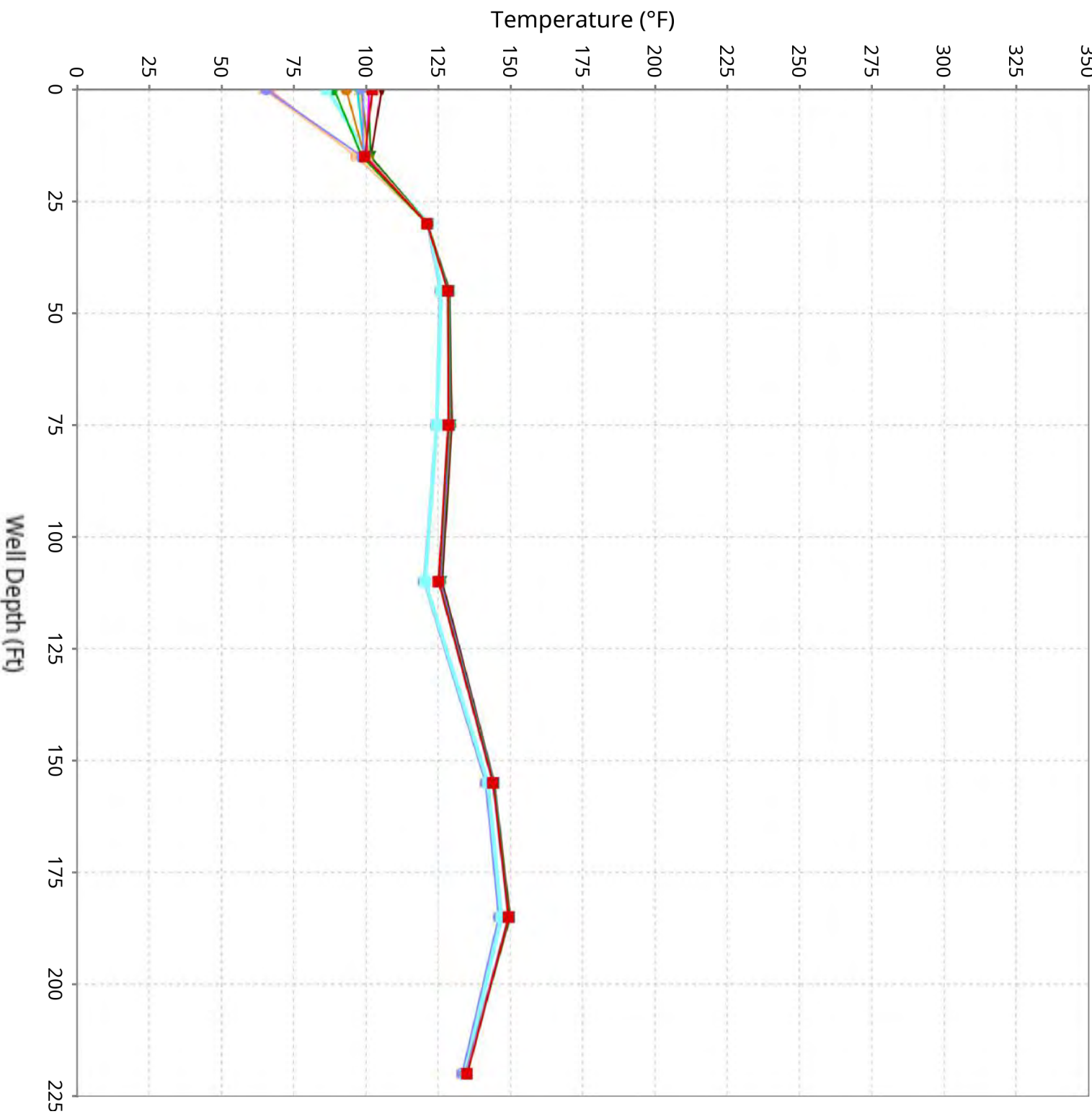
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-39

Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-40

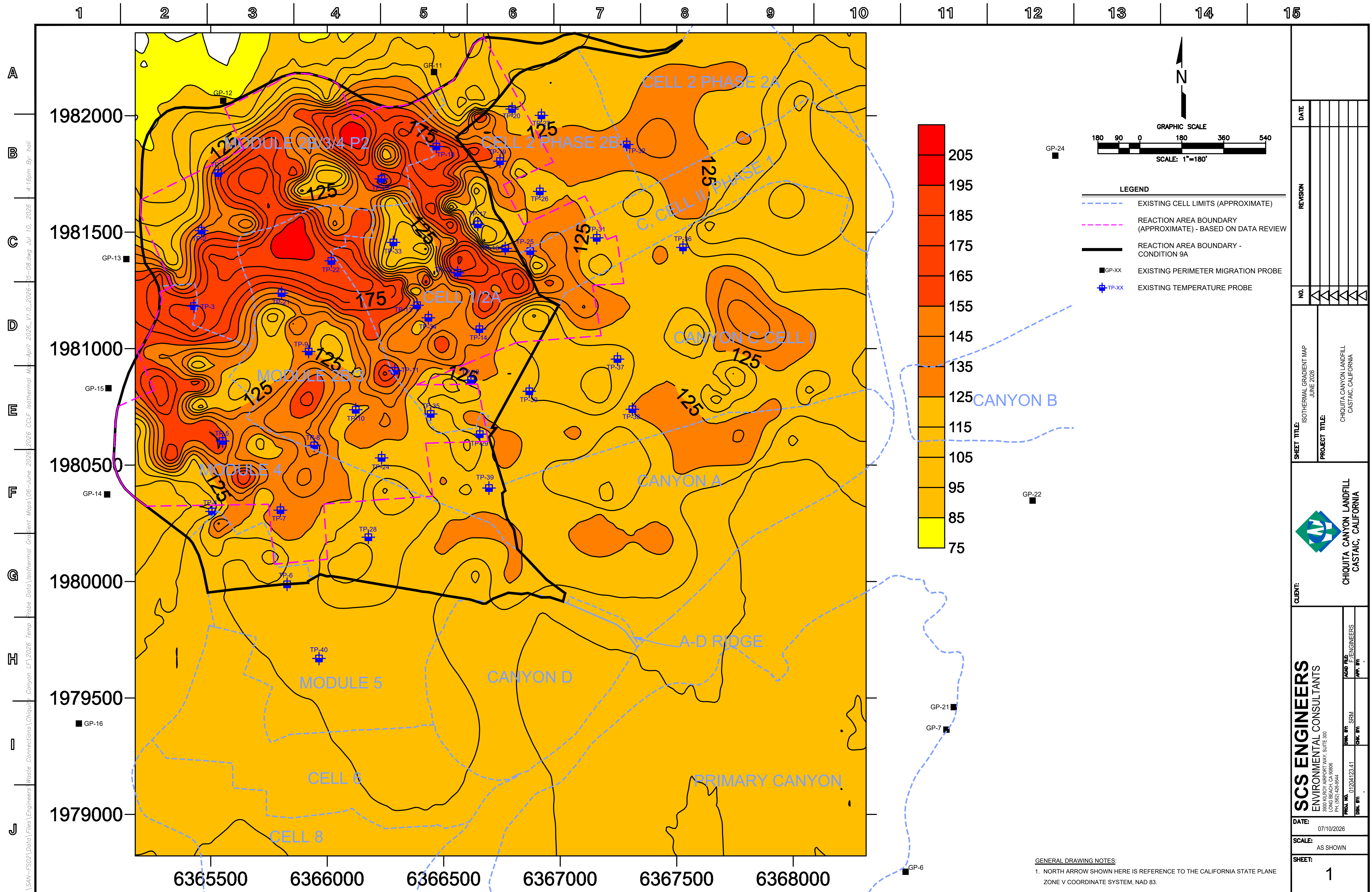
Maximum weekly data for initial 4-weeks of operation compared to the latest 10-weeks



- Dec 15, 2025
- Dec 22, 2025
- Dec 29, 2025
- Jan 5, 2026
- May 5, 2026
- May 12, 2026
- May 19, 2026
- May 26, 2026
- Jun 2, 2026
- Jun 9, 2026
- Jun 16, 2026
- Jun 23, 2026
- Jun 30, 2026
- Jul 7, 2026

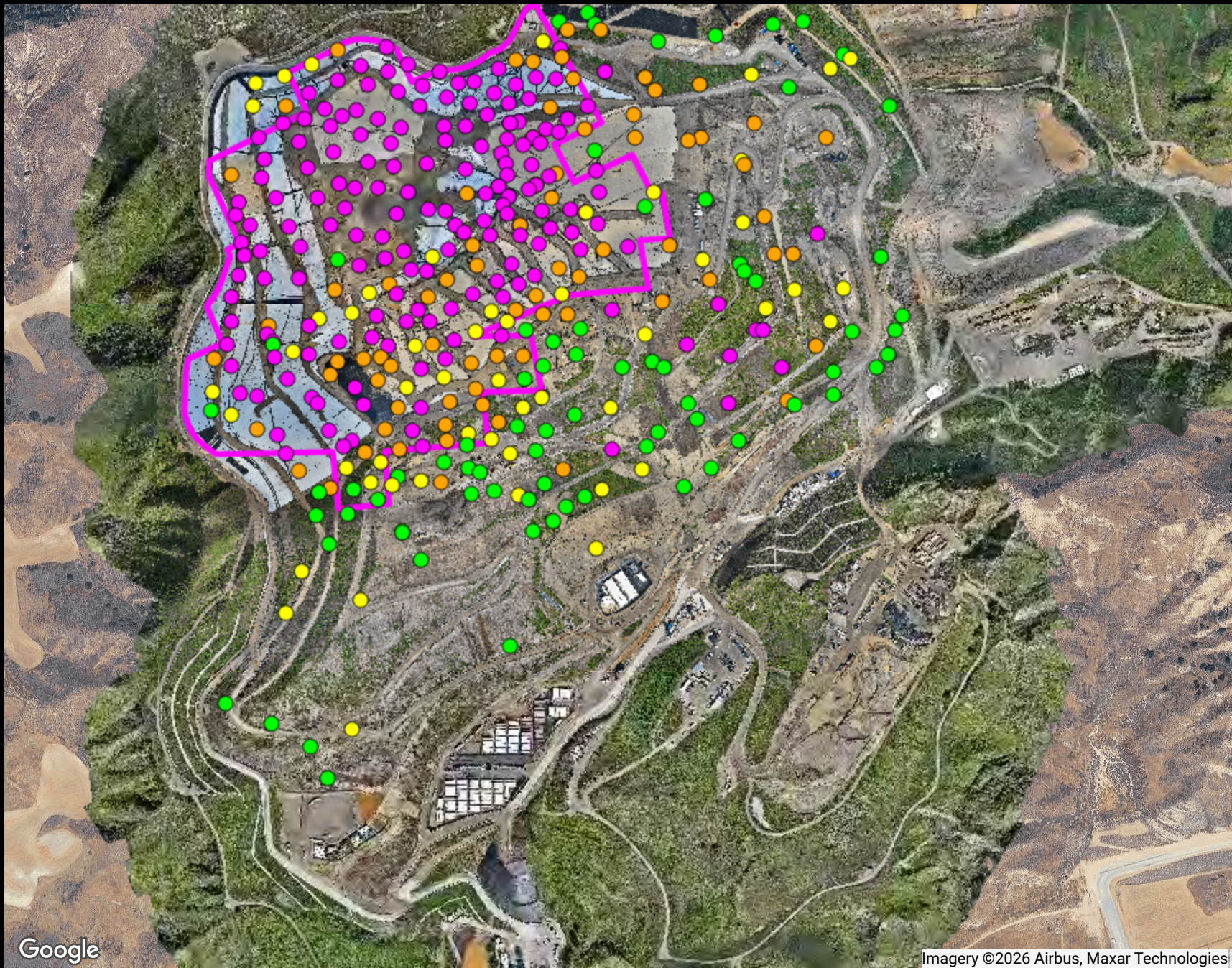
Attachment C

Isothermal Gradient Range Map



Attachment D

Wellhead Methane-to-Carbon Dioxide Ratio Range Map



Ranges Mapped			# Points
	>= 0	and < 0.5	173
	>= 0.5	and < 0.9	74
	>= 0.9	and < 1.1	54
	>= 1.1	and < 1.5	77
	>= 1.5	and < 101	

Point Type Legend

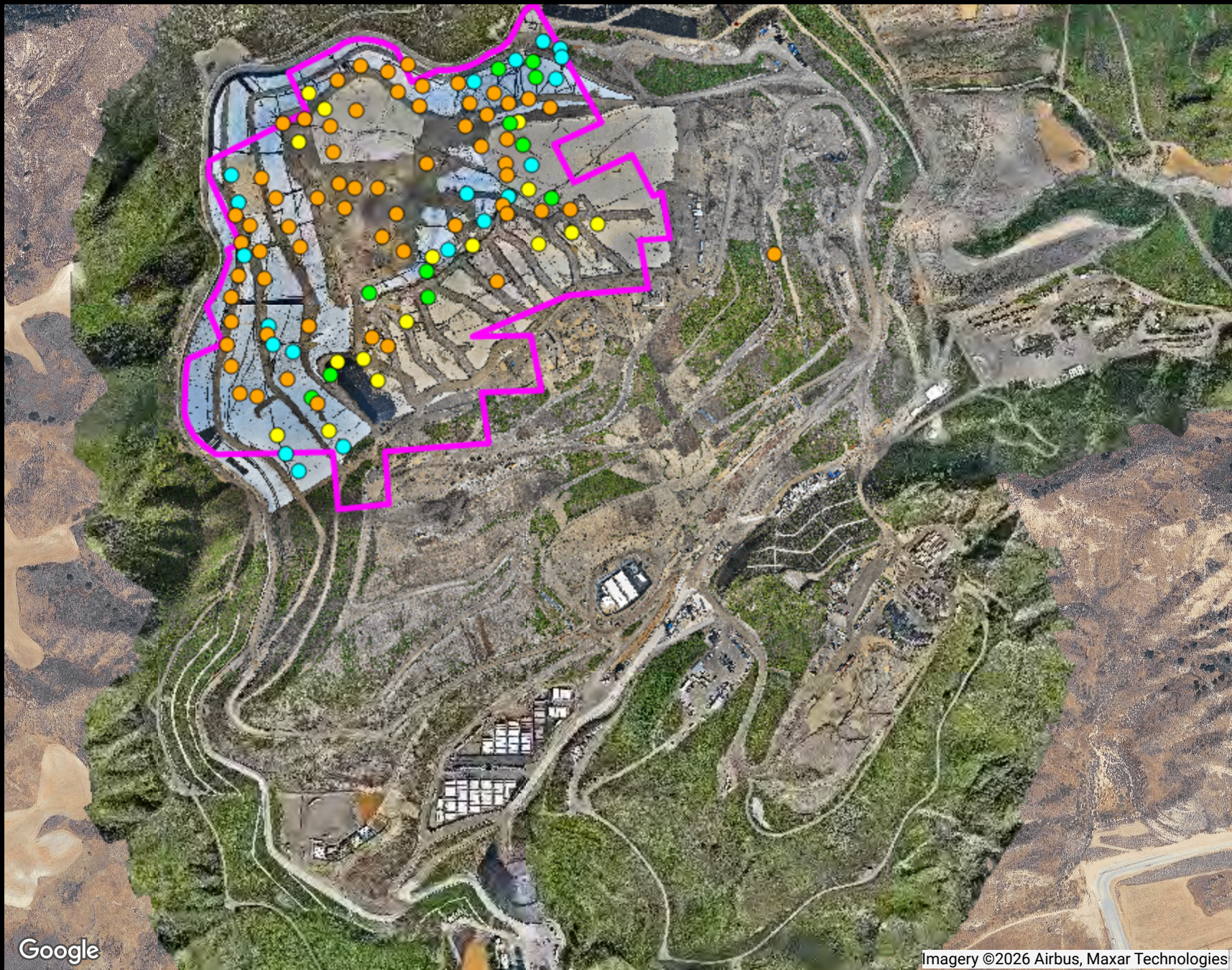
- ▽ calibration record
- ◇ flare-engine-ghg
- △ monitoring probe
- sample port
- well

Chiquita Canyon Landfill
Range Map
Parameter: CH₄/CO₂ Ratio (high range)
Analysis Method: MostRecent
 Date Range: 06/01/2026 - 06/30/2026
 Map generation date : 07/10/2026



Attachment E

Wellhead Hydrogen Range Map



Ranges Mapped

				# Points
	>= 0	and <	20000	20
	>= 20000	and <	50000	11
	>= 50000	and <	100000	16
	>= 100000	and <	999999	62

The range values noted above are in units of parts per million (ppm). Divide by 10,000 to convert these values to units of percent by volume.

Point Type Legend

- ▽ calibration record
- ◇ flare-engine-ghg
- △ monitoring probe
- sample port
- well

Chiquita Canyon Landfill
Range Map
Parameter: H2 (mid range)
Analysis Method: MostRecent

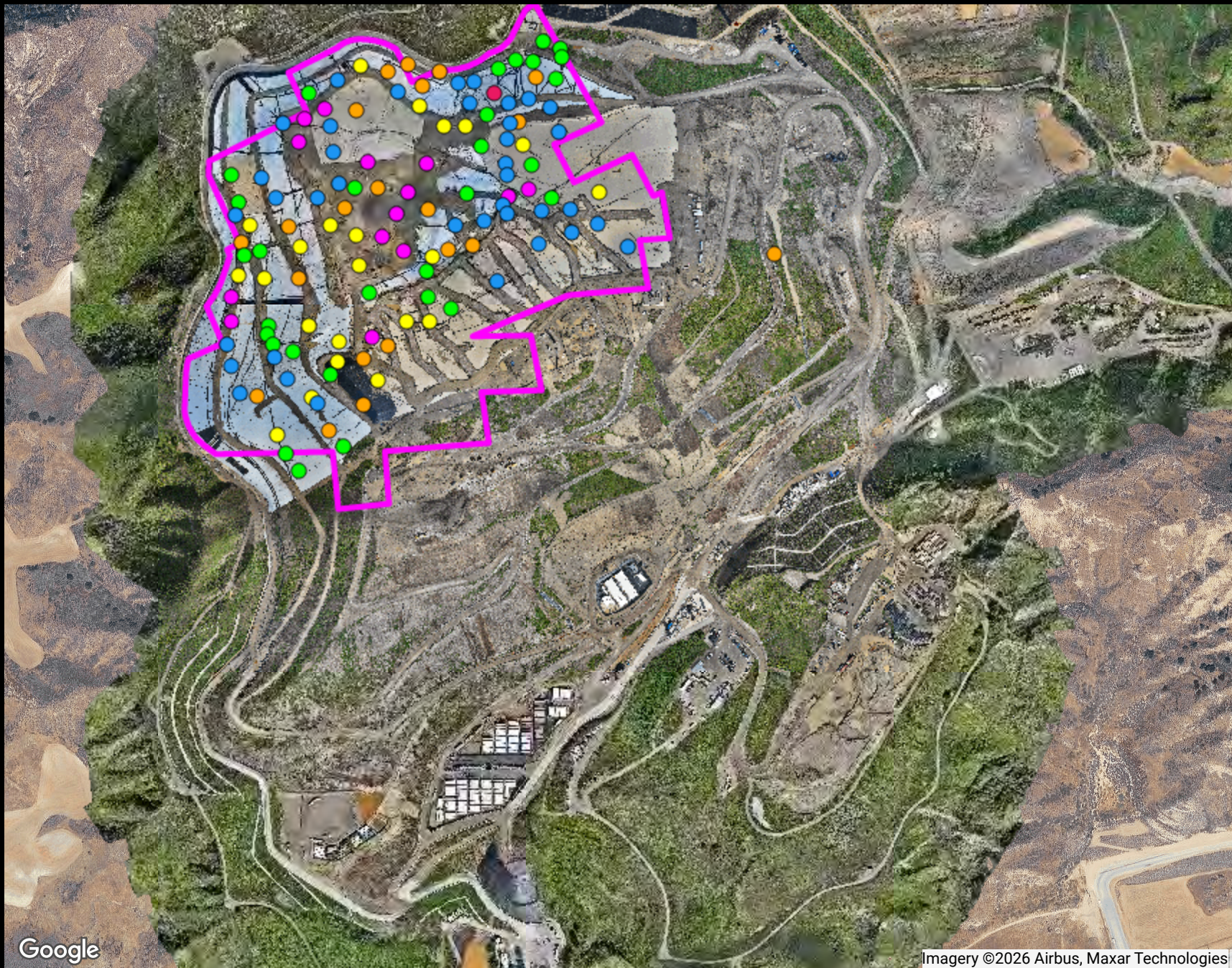
Date Range: 06/01/2026 - 06/30/2026

Map generation date : 07/10/2026



Attachment F

Wellhead Carbon Monoxide Range Map



Ranges Mapped			# Points
	>= 0	and < 500	30
	>= 500	and < 1000	22
	>= 1000	and < 1500	21
	>= 1500	and < 2000	14
	>= 2000	and < 5000	38
	>= 5000	and < 100000	1

Point Type Legend

- ▽ calibration record
- ◇ flare-engine-ghg
- △ monitoring probe
- sample port
- well

Chiquita Canyon Landfill
Range Map
Parameter: CO LAB (mid range)
Analysis Method: MostRecent

Date Range: 06/01/2026 - 06/30/2026

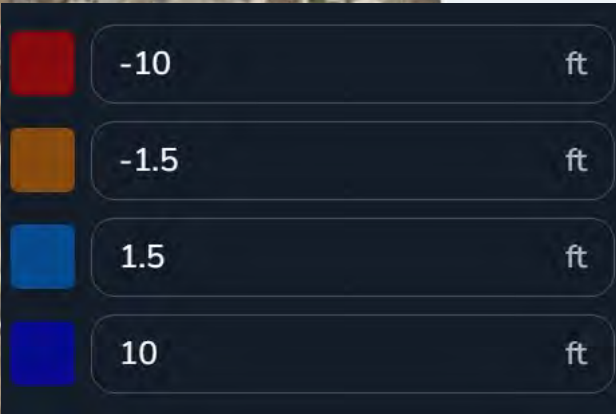
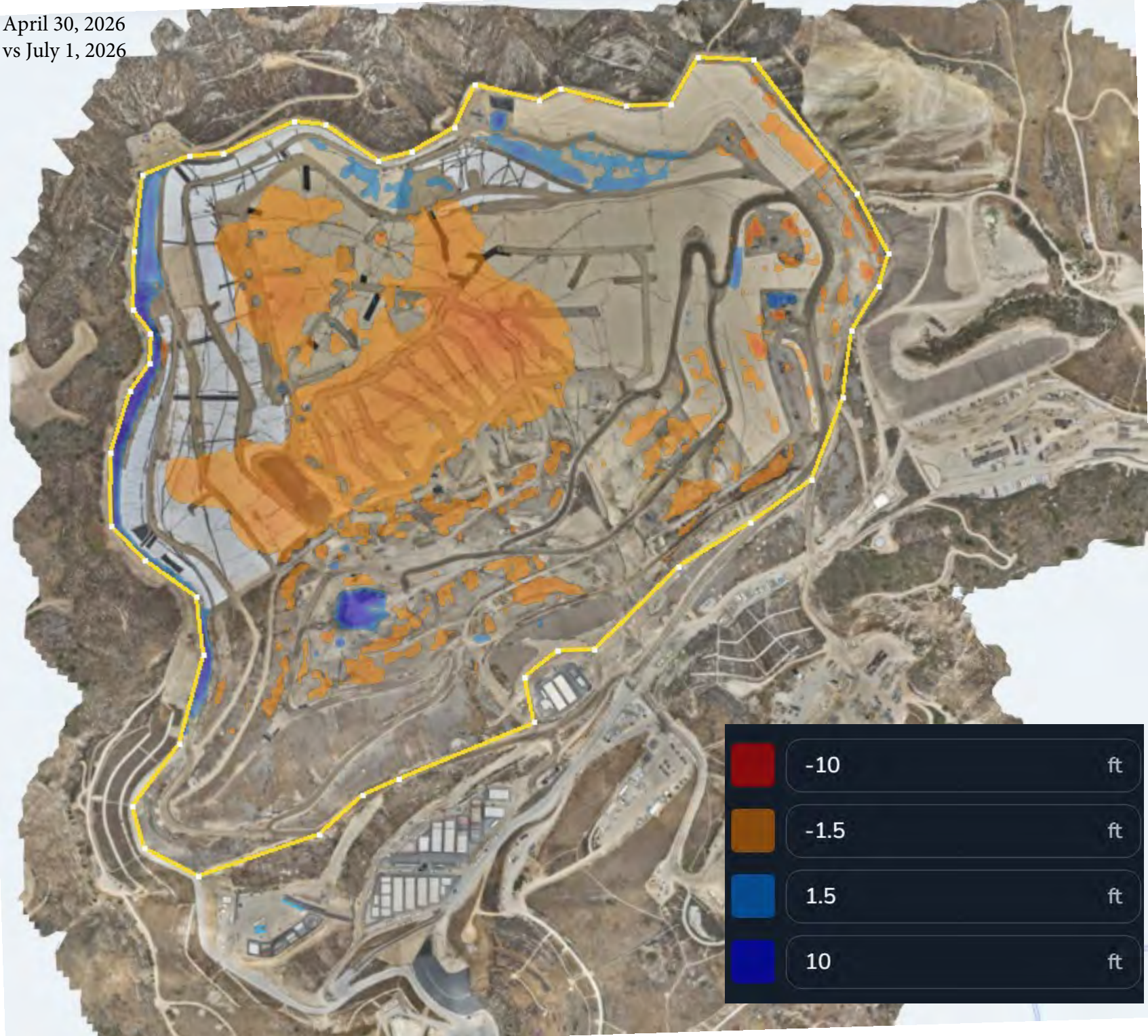
Map generation date : 07/10/2026



Attachment G

Settlement Isopach Range Maps

April 30, 2026
vs July 1, 2026



May 27, 2026
vs July 1, 2026

