June 10, 2026
File No. 01204123.21-13

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

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

Dear Mr. Chen:

In accordance with Condition Nos. 9a and 9b of the Modified Stipulated Order for Abatement (SOFA) pertaining to the Chiquita Canyon Landfill (Landfill or Facility) (Case No. 6177-4), SCS Engineers (SCS), on behalf of Chiquita Canyon, LLC (Chiquita) has prepared the data-determined Reaction Mitigation Area boundary for May 2026 considering 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 (CH_4:CO_2) (methane concentrations of less than 30 percent in conjunction with CH_4:CO_2 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 (H_2) (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. For each individual landfill grid that is contiguous to the prior month's Reaction Mitigation Area, where any three or more parameters listed above indicating reaction conditions are present at the time of evaluation, including any combination of wells, temperature probes, or areas within the grid, the data-determined Reaction Mitigation Area boundary depicted on the Reaction Mitigation Area map will be adjusted to 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, then the grid will be added to the Reaction Mitigation Area.

In addition to the listed parameters, the following have been considered for the determination of the Reaction Mitigation Area boundary, also using an individual landfill grid-based evaluation:

- 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, revised 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. 9a, 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. 9b data-determined Reaction Mitigation Area as a dashed magenta line.

CONCLUSION

As presented on the Drawing included as Attachment A, the extent of the data-determined Reaction Mitigation Area (dashed magenta line) is fully contained within the Reaction Mitigation Area boundary decreed in the SOFA (solid black line), except for Grid Nos. 38, 41, 53, 76, 77, 82n and 145 through 149, of which all or a portion protrudes east beyond the Cell 1/2A boundary. Because the data-driven Reaction Mitigation Area is not fully contained within the Reaction Mitigation Area boundary, the Reaction Mitigation Area boundary as prescribed in Condition No. 9a is modified to include portions of these Grids that extend beyond the Cell 1/2A boundary.

- Grid No. 38 is being incorporated based on the poor LFG quality criterium;
- Grid No. 41 is being incorporated based on the poor LFG quality and hydrogen criteria;
- Grid No. 53 is being incorporated based on the TMP temperature and poor LFG quality criteria;
- Grid No. 77 is being incorporated based on the TMP temperature, poor LFG quality, and CO concentration criteria;
- Grid No. 82 is being incorporated based on the poor LFG quality, hydrogen, and CO criteria.

The maximum temperature measurements recorded at the 40 in-situ waste temperature monitoring probes (both 7-Day and 30-Day values) during May 2026 are presented in **Attachment B** in graphical format. 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 CH_4:CO_2 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 H_2 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

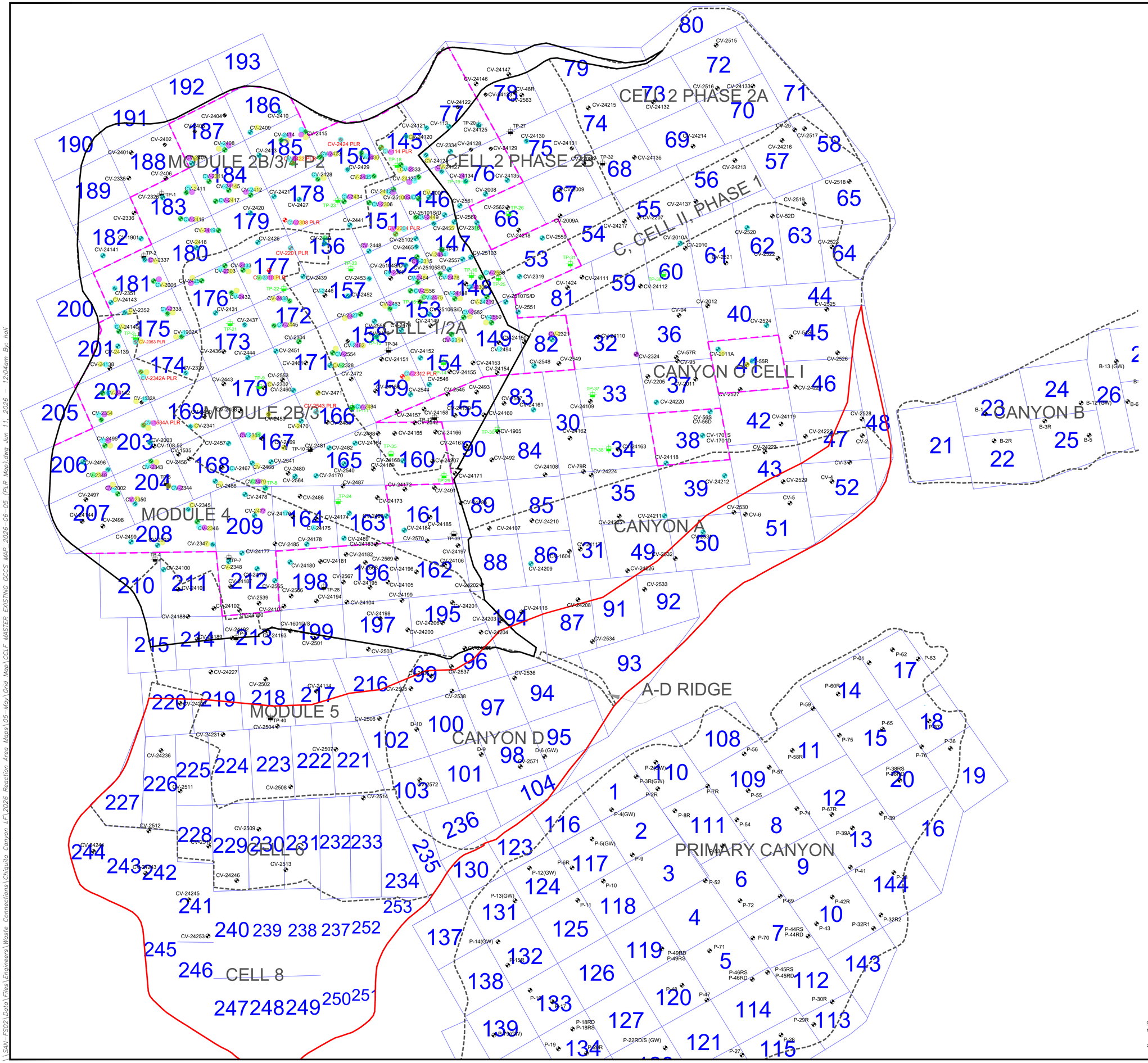
Patrick S. Sullivan, BCES, CCP
Senior Vice President
SCS Engineers

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 Range Map
Attachment E – Wellhead Hydrogen Range Map
Attachment F – Wellhead Carbon Monoxide Range Map
Attachment G – Settlement Isopach Range Map



GENERAL DRAWING NOTES:

1. EXISTING TOPOGRAPHIC SURVEY INFORMATION SHOWN WAS PROVIDED BY PROPELLOR. AERIAL PHOTOGRAPHY DATED MAY 27, 2026.
2. NORTH ARROW SHOWN HERE IS REFERENCE TO THE CALIFORNIA STATE PLANE ZONE V COORDINATE SYSTEM, NAD 83.

DATE | REVISION | NO.

REACTION MITIGATION AREA

CHIQUITA CANYON LANDFILL
CASTAIC, CALIFORNIA

SHEET TITLE:

PROJECT TITLE:

CLIENT:

CHIQUITA CANYON LANDFILL
CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
3900 KILROY AIRPORT WAY, SUITE 300
LONG BEACH, CA 90806
PH: (562) 426-9544

PROJ. NO: 01234123.45 | DWN. BY: HA | CHK. BY: - | SCH. BY: - | APP. BY: - | ACAD: NUCADASBUILT-MASTERS

DATE: 06/10/2026

SCALE: AS SHOWN

1 of 1

\\SAN-FS02\Data\Files\Engineers\Waste Connections\Chiquita Canyon LF\2026 Reaction Area Maps\05-May\Grid Map\CCLF MASTER EXISTING GCCS MAP_2026-06-05_(PLR Map).dwg Jun 11, 2026 - 12:04am By: holl

Solid Waste Borehole Maximum Temperature Profiles Over 10 Weeks

for 3/16/202612:00AM to 5/31/202612:00AM

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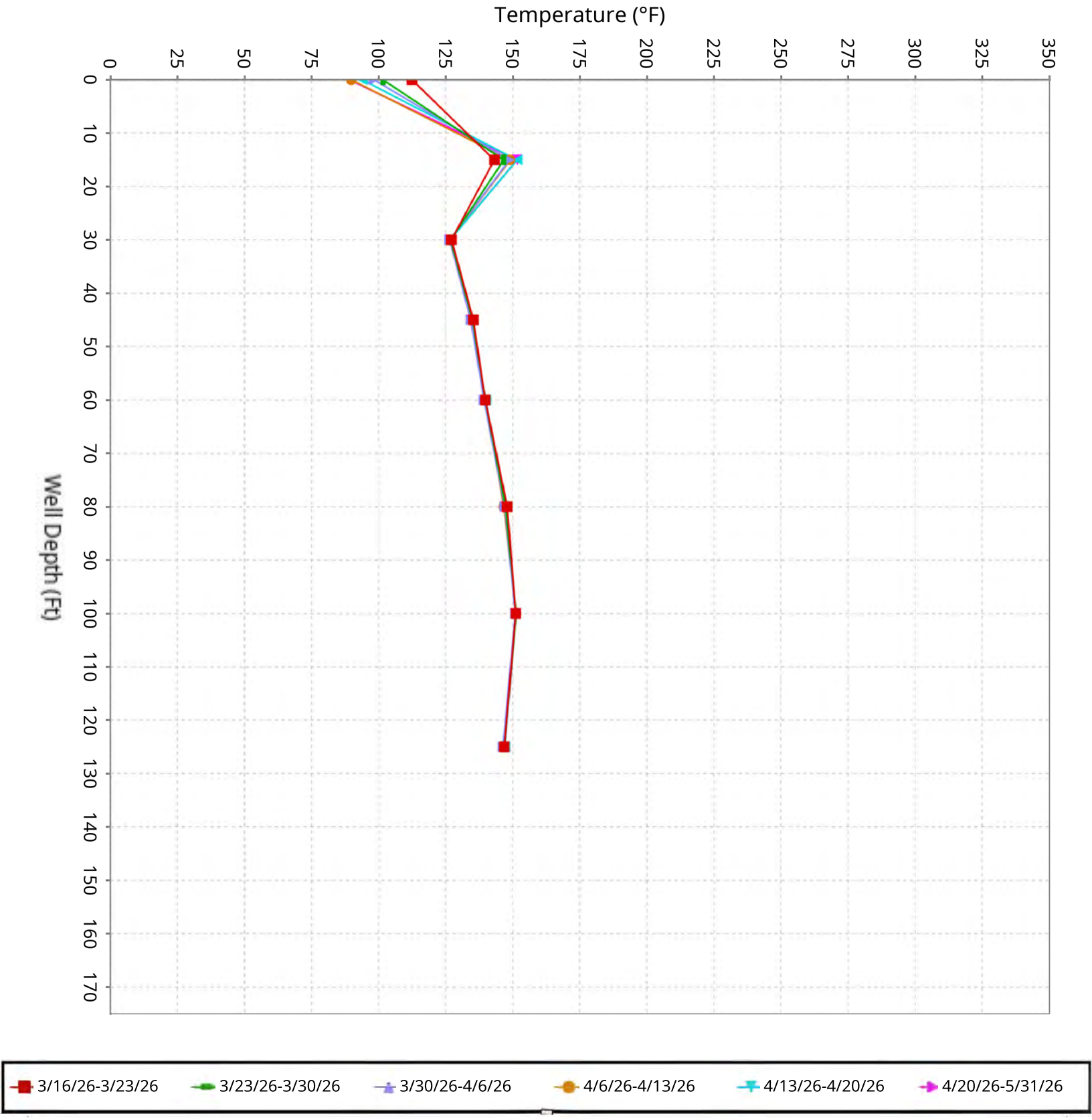
07224053.00 | June 10, 2026

274 Granite Run Drive
Lancaster, PA 17601
717-550-6330

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

Maximum data for 3/16/2026 12:00 AM to 5/31/2026 12:00 AM



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

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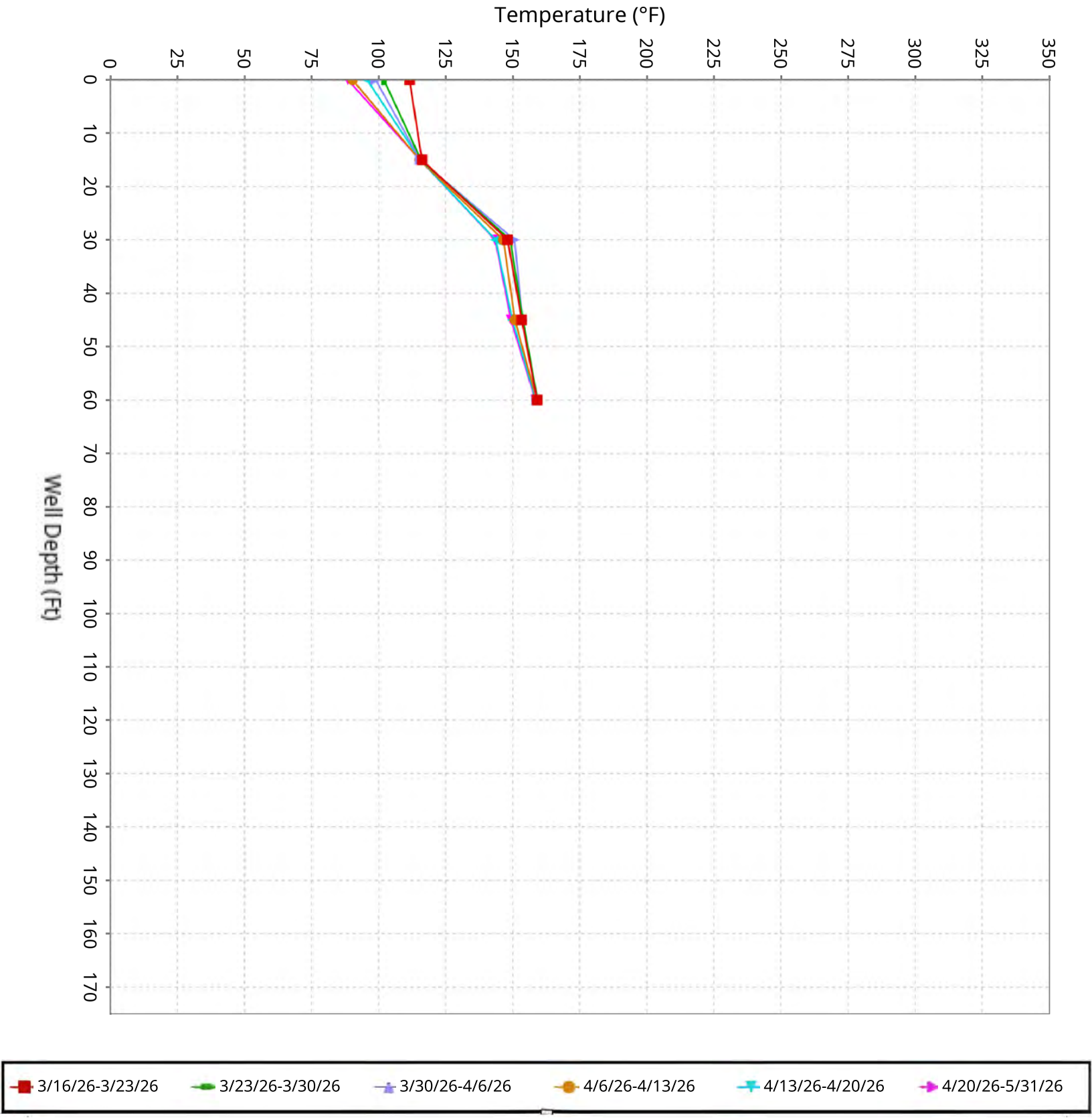

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-3

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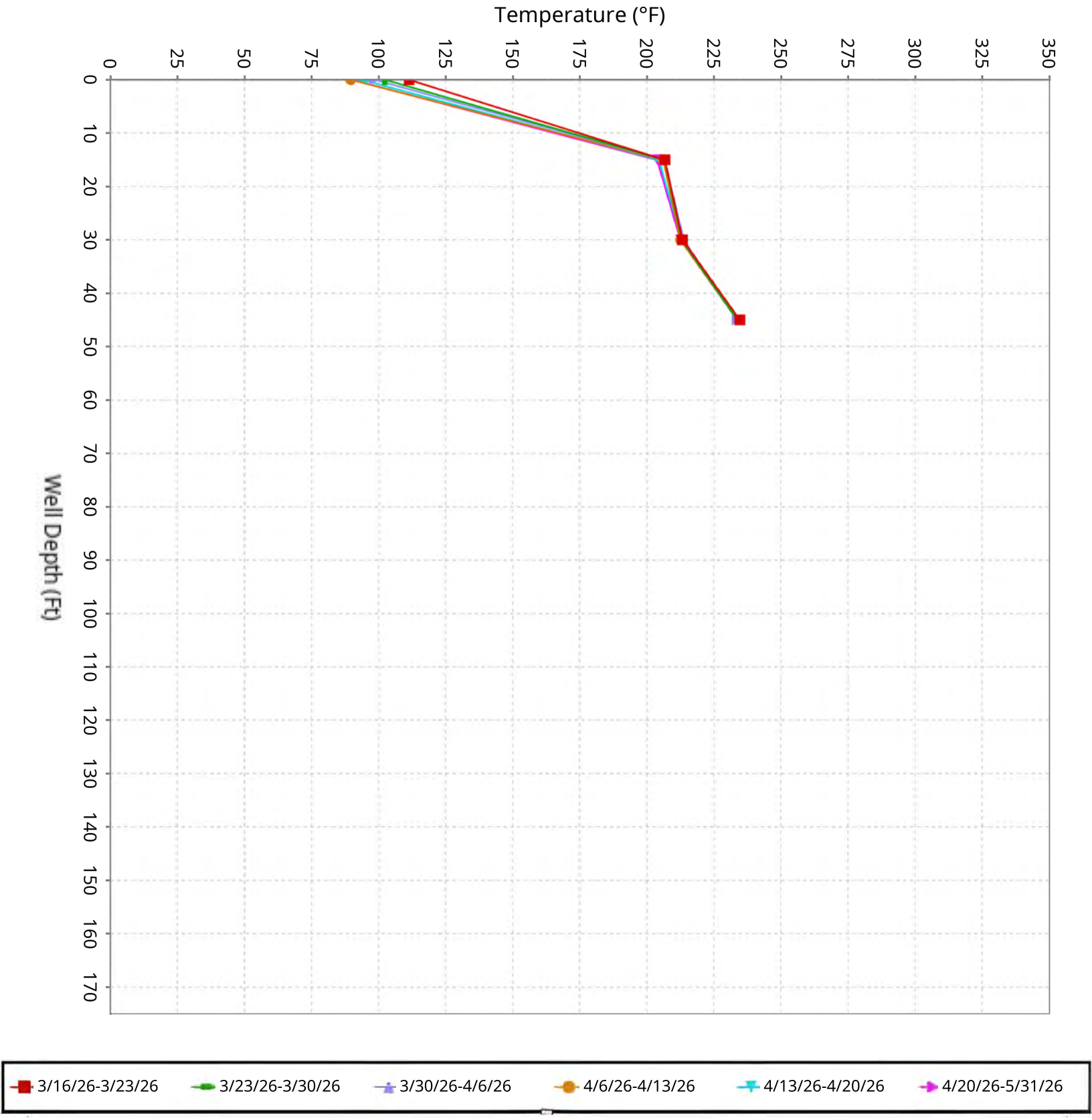

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-4

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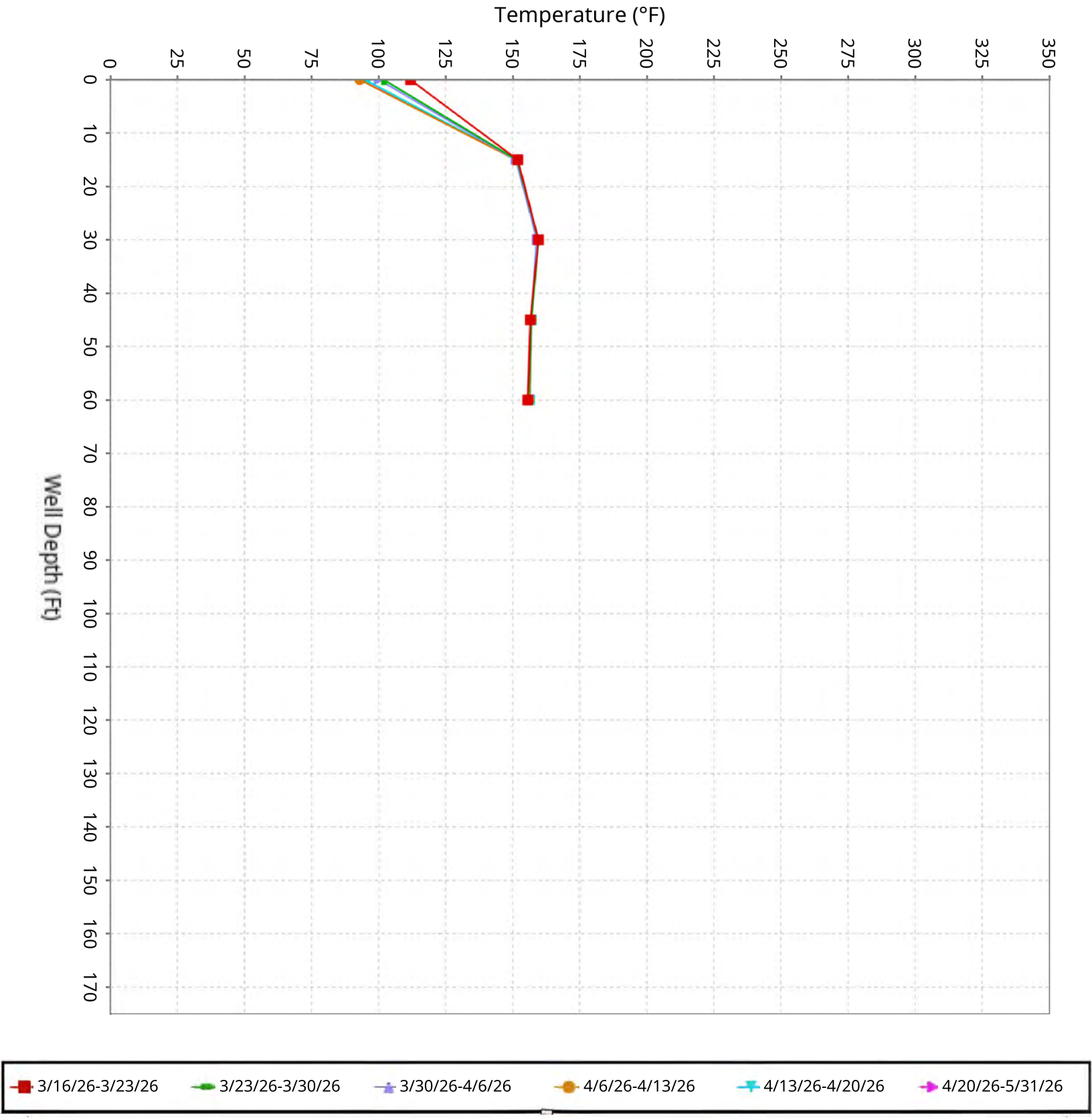

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-5

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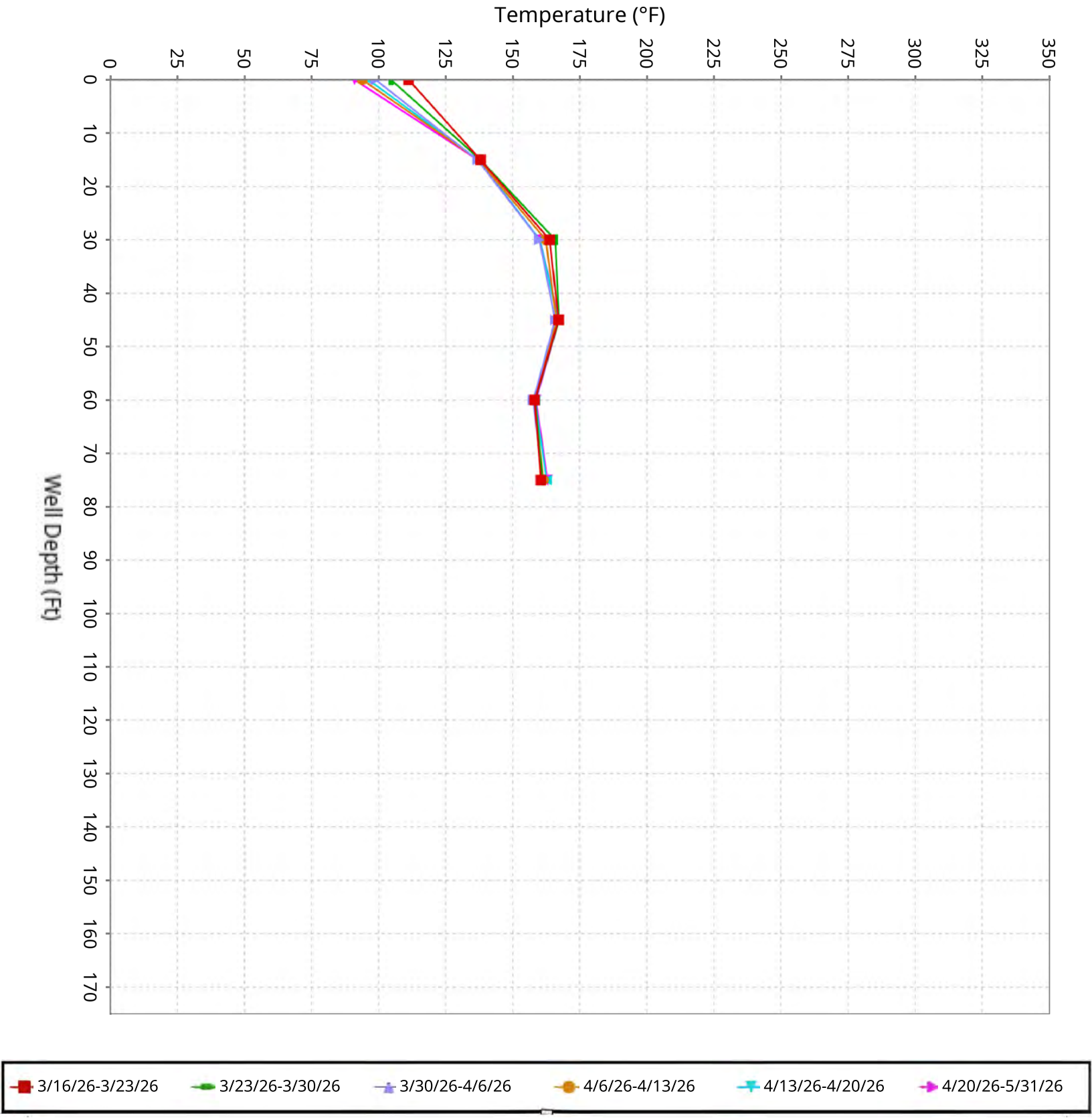

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-6

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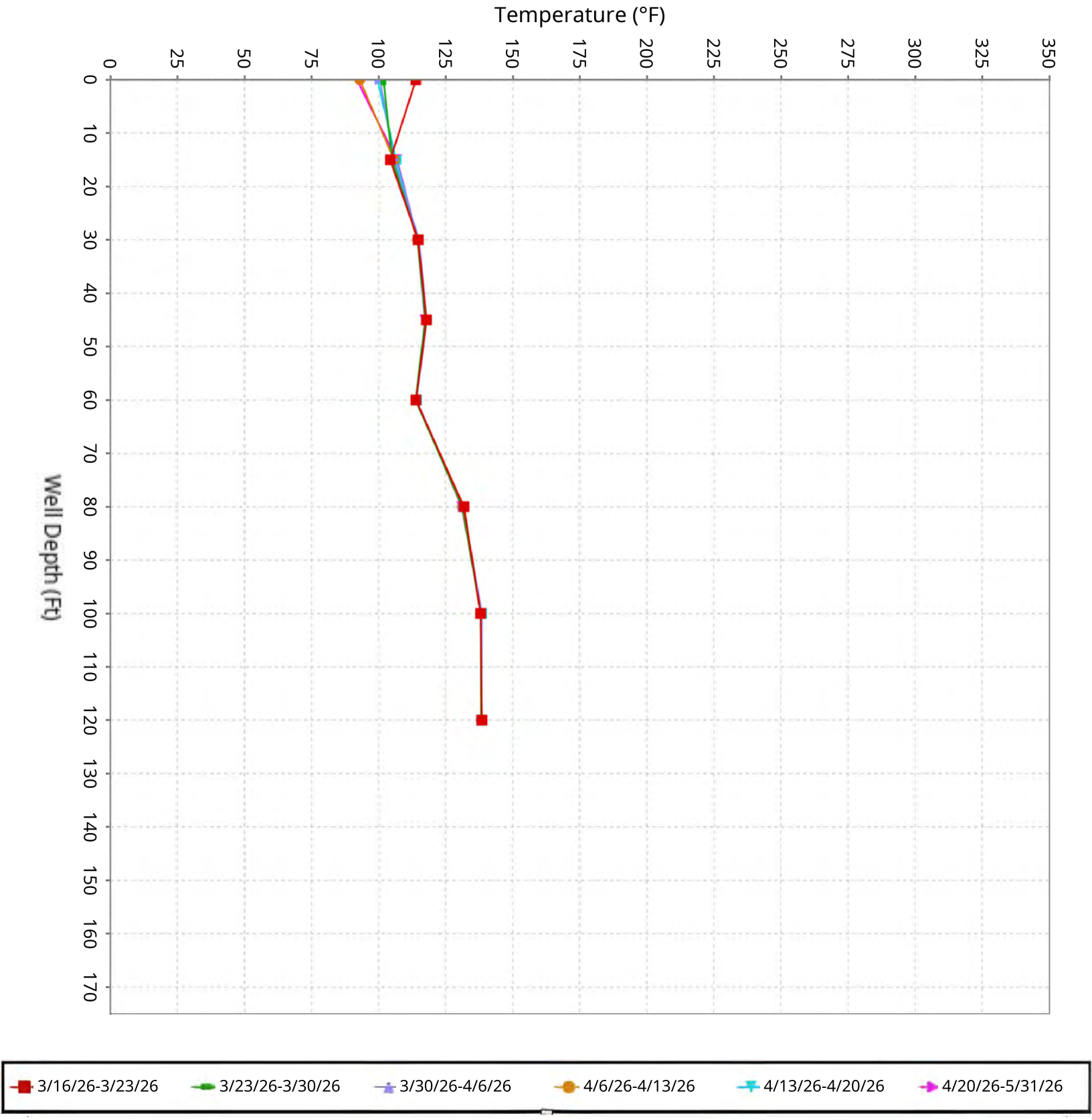

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-7

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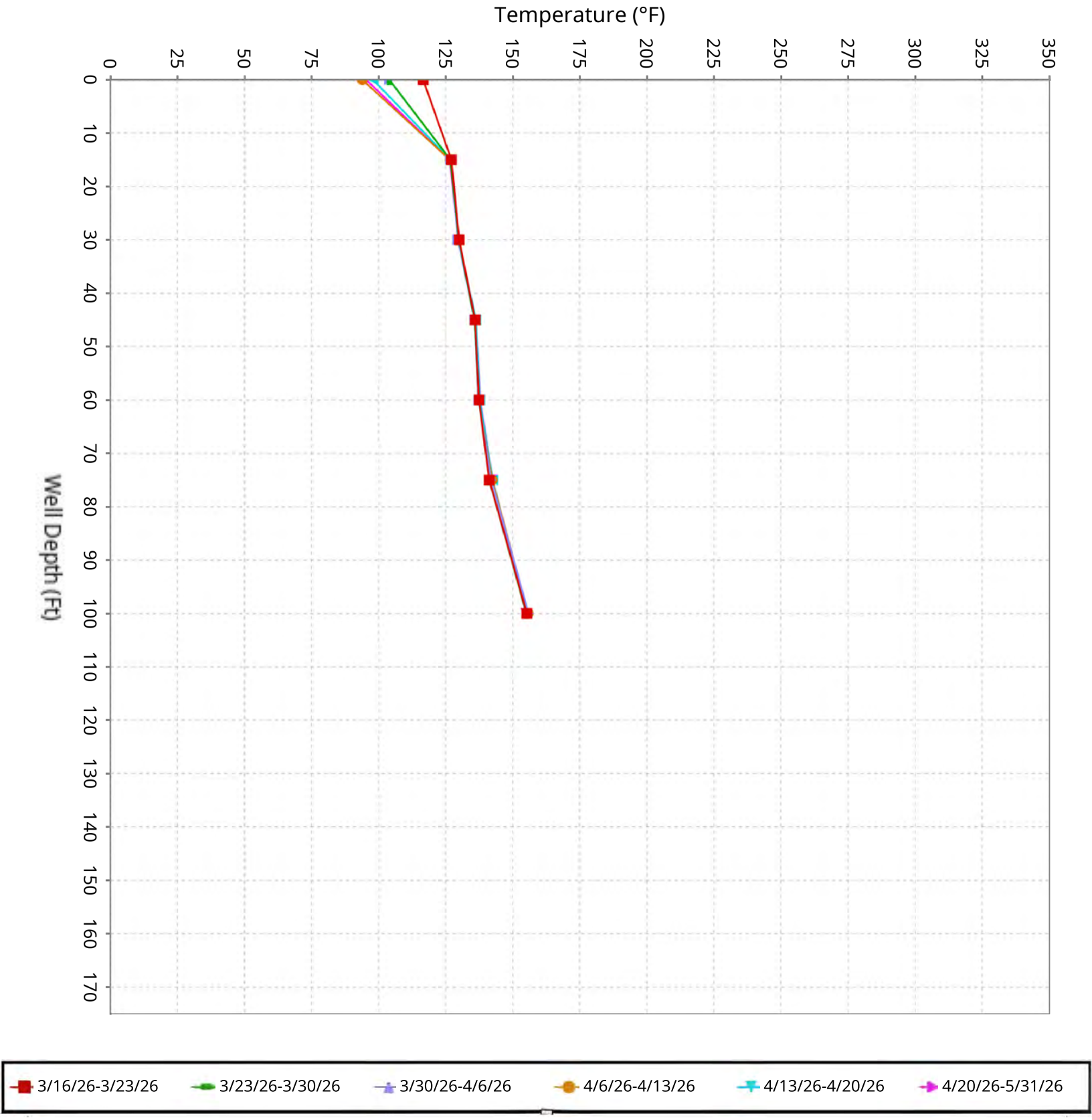

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-8

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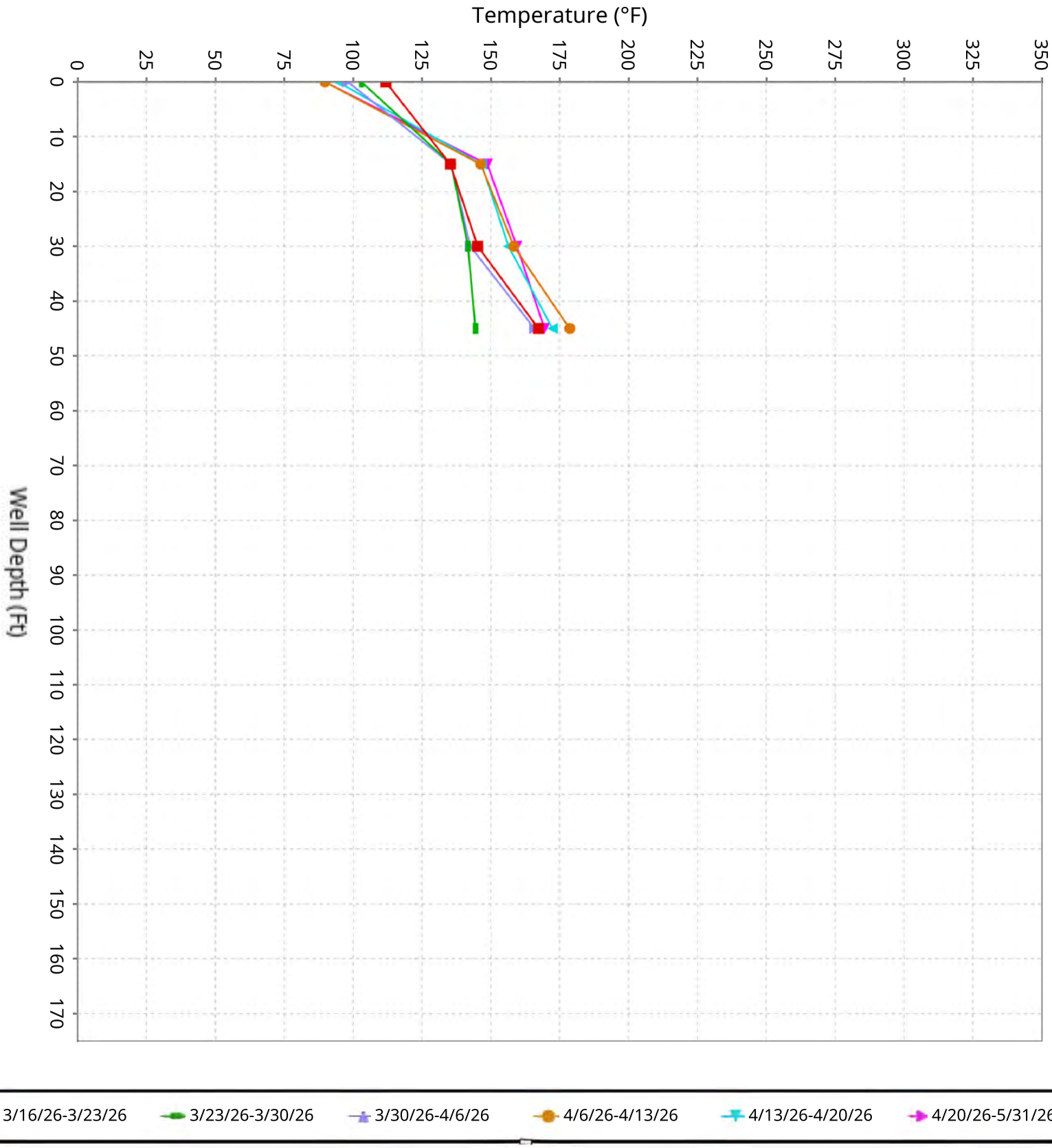

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-9

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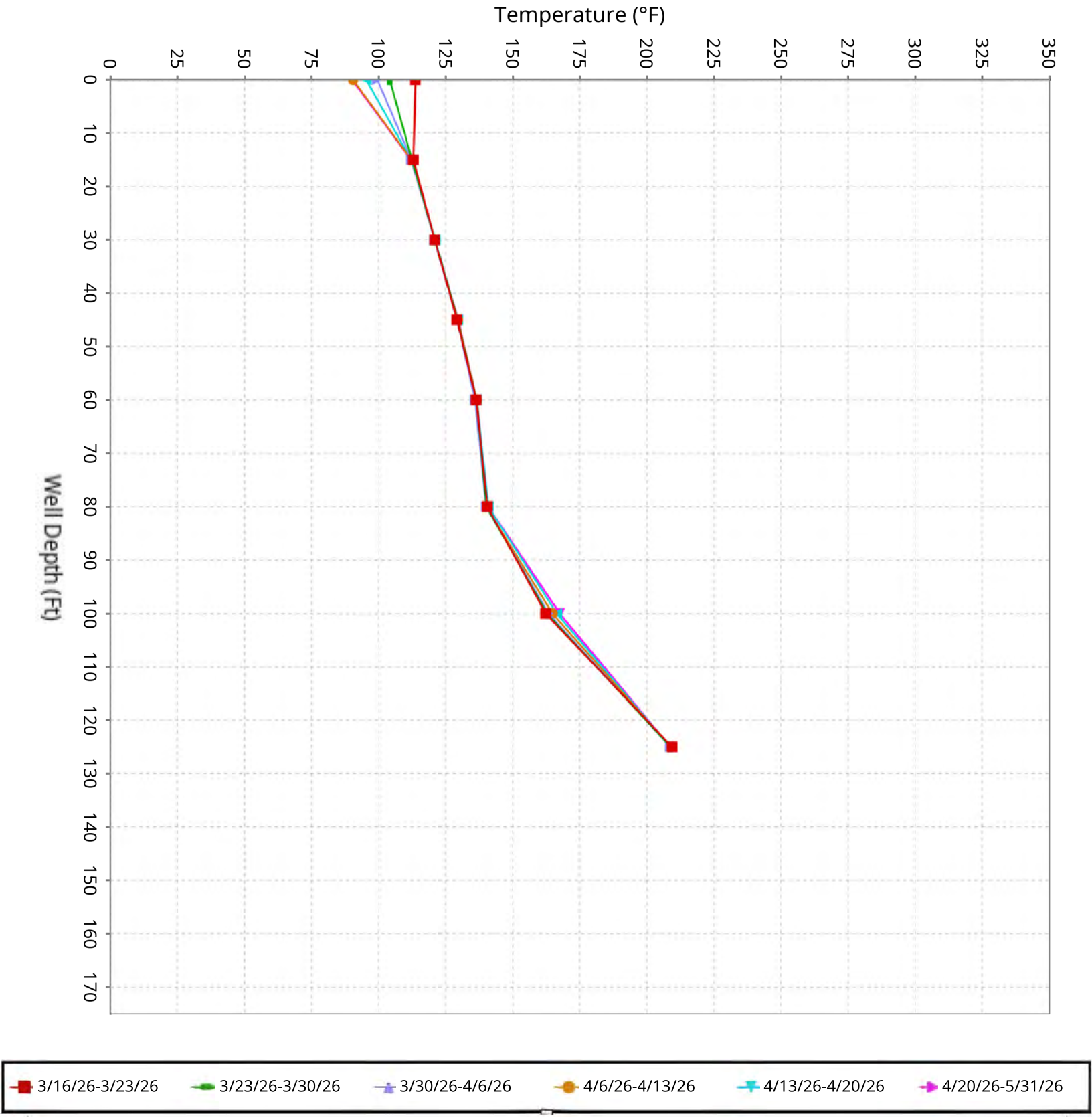

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-10

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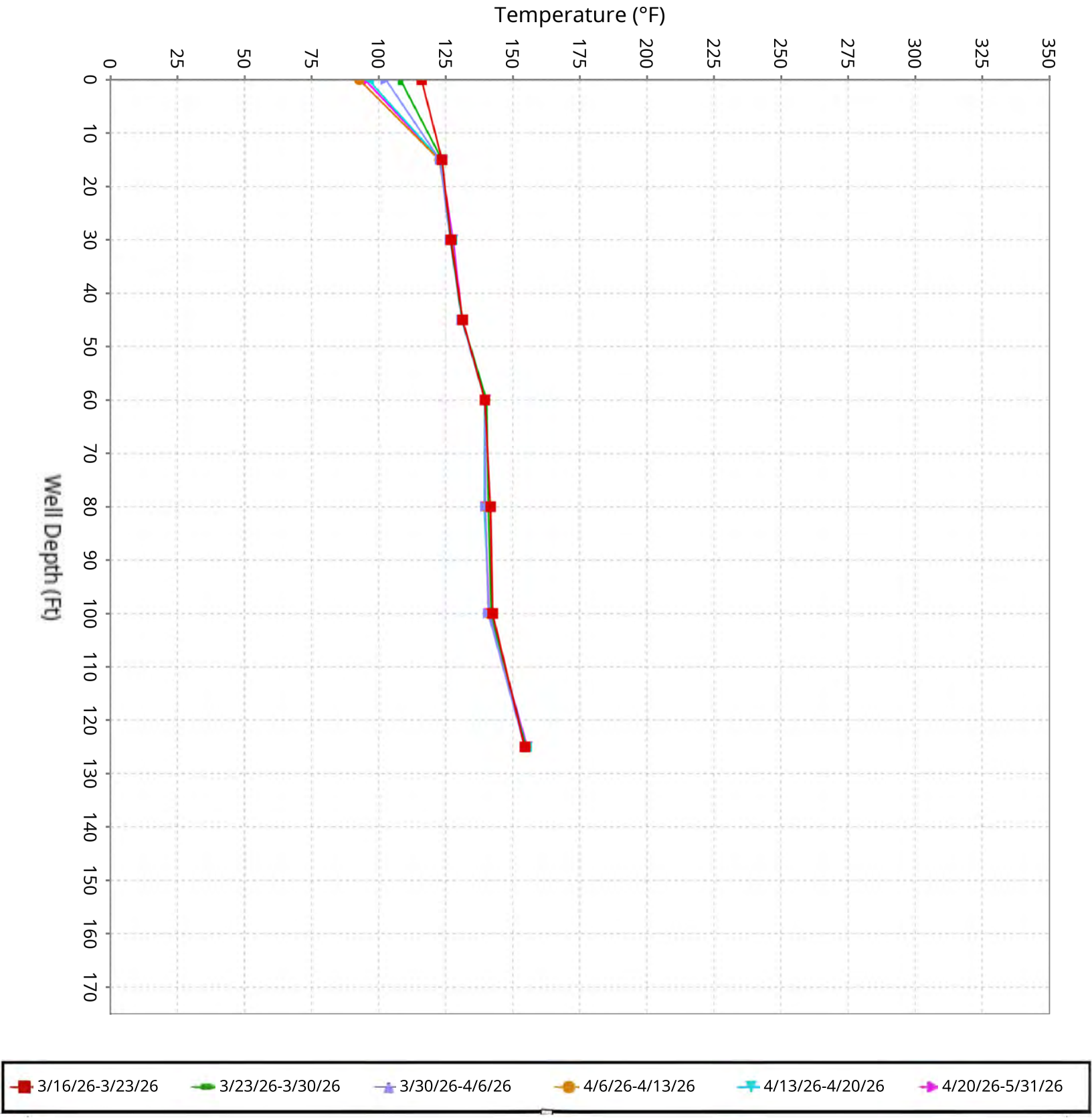

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-11

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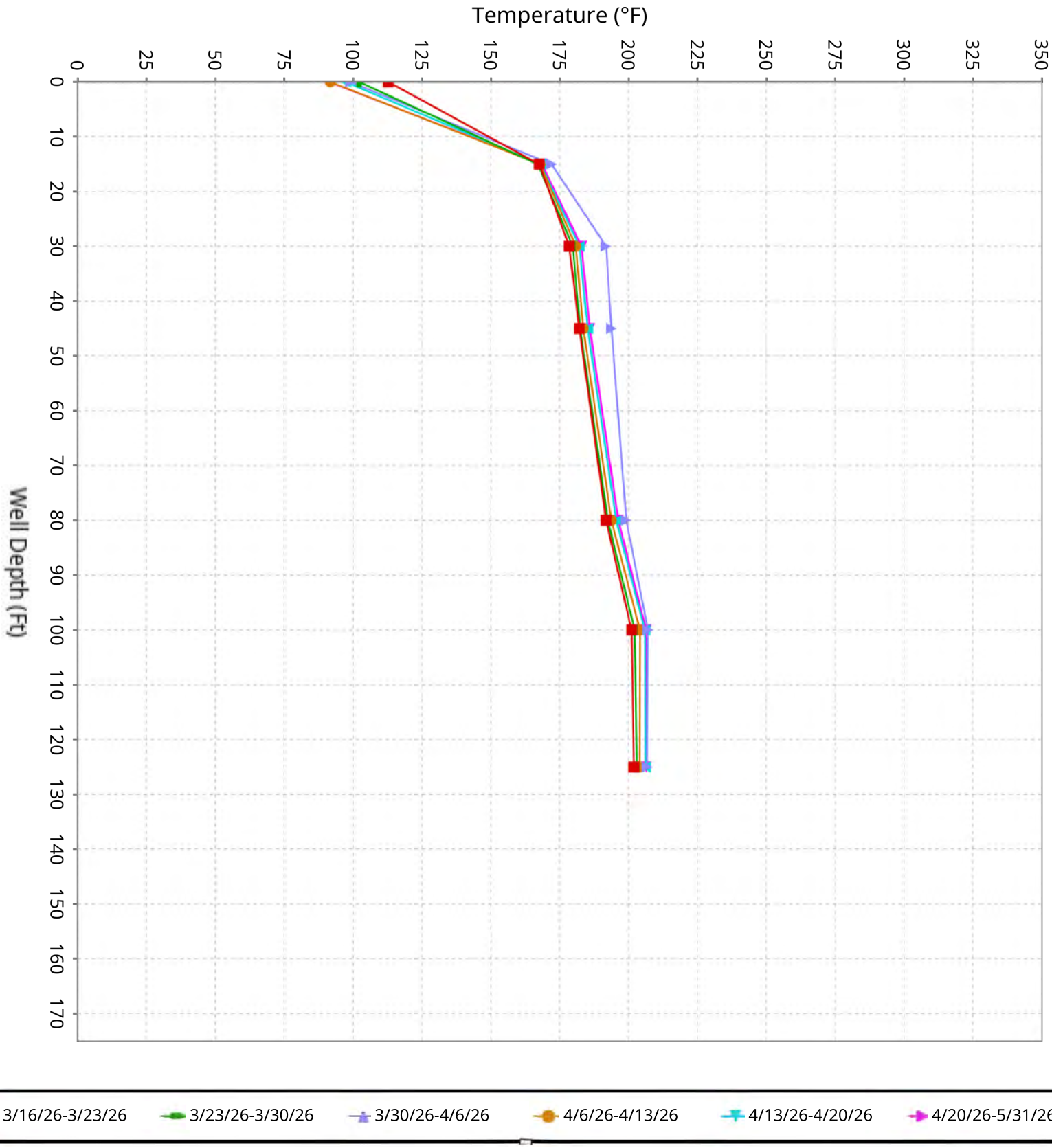

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-12

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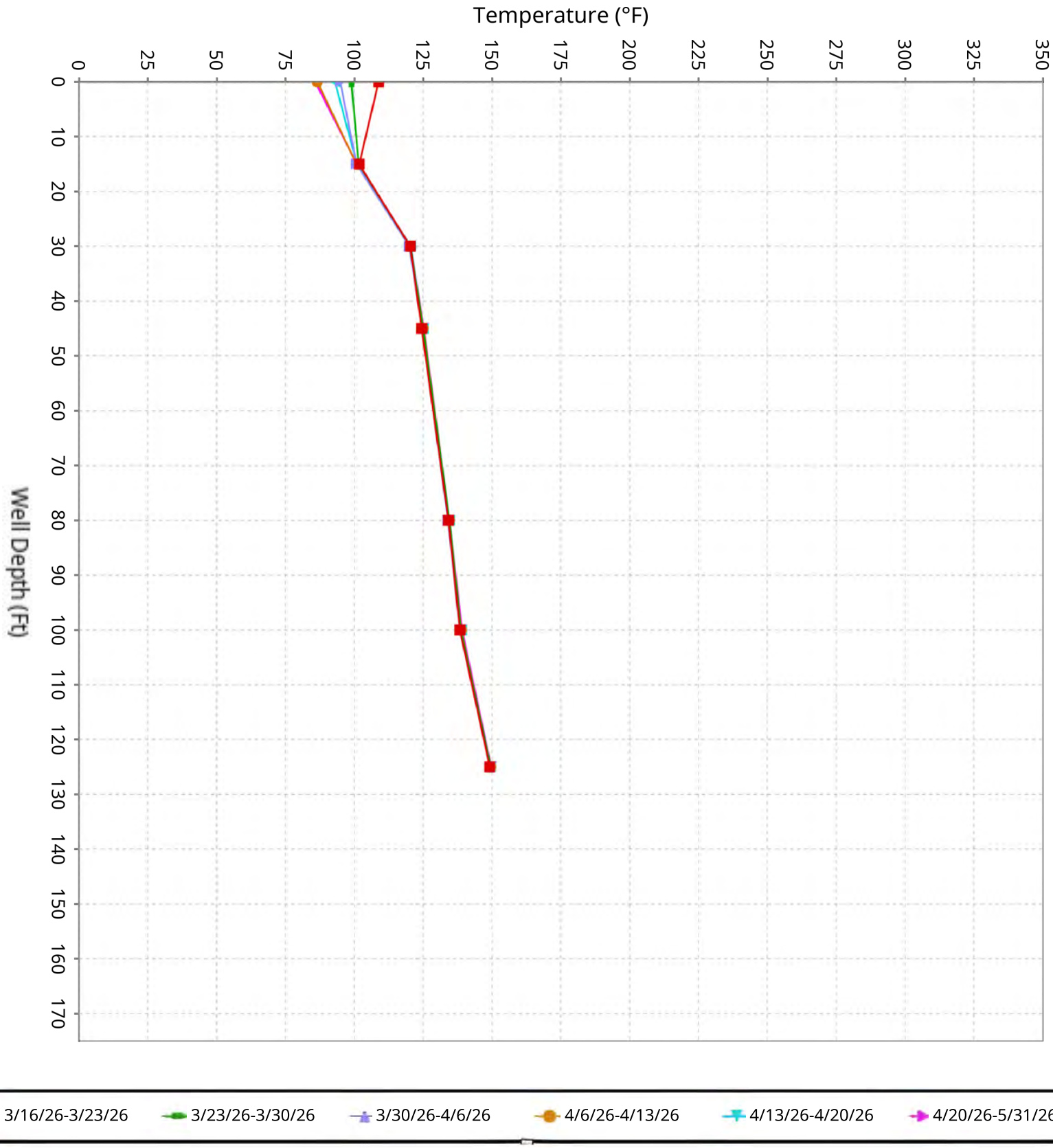

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-13

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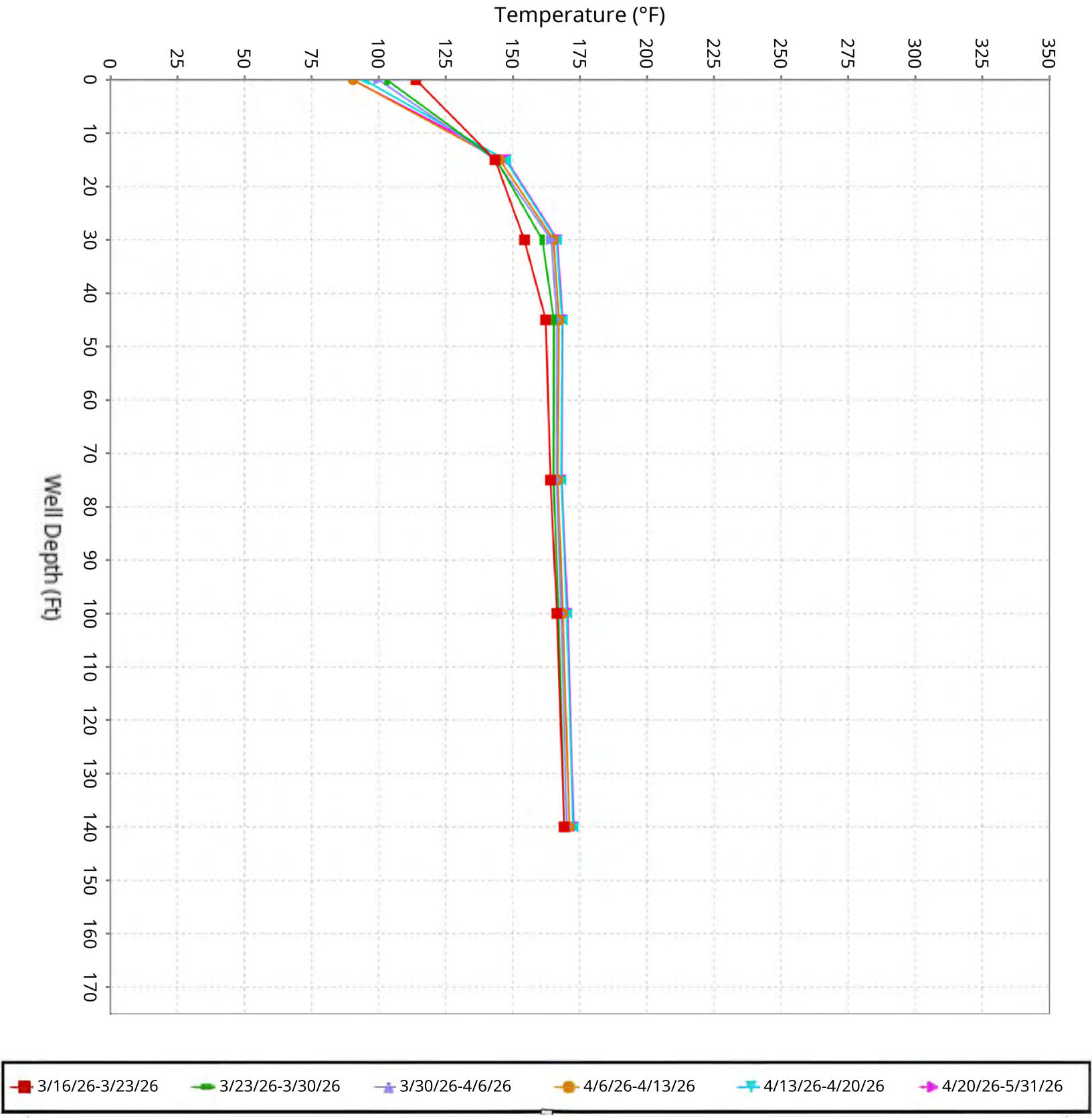

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-14

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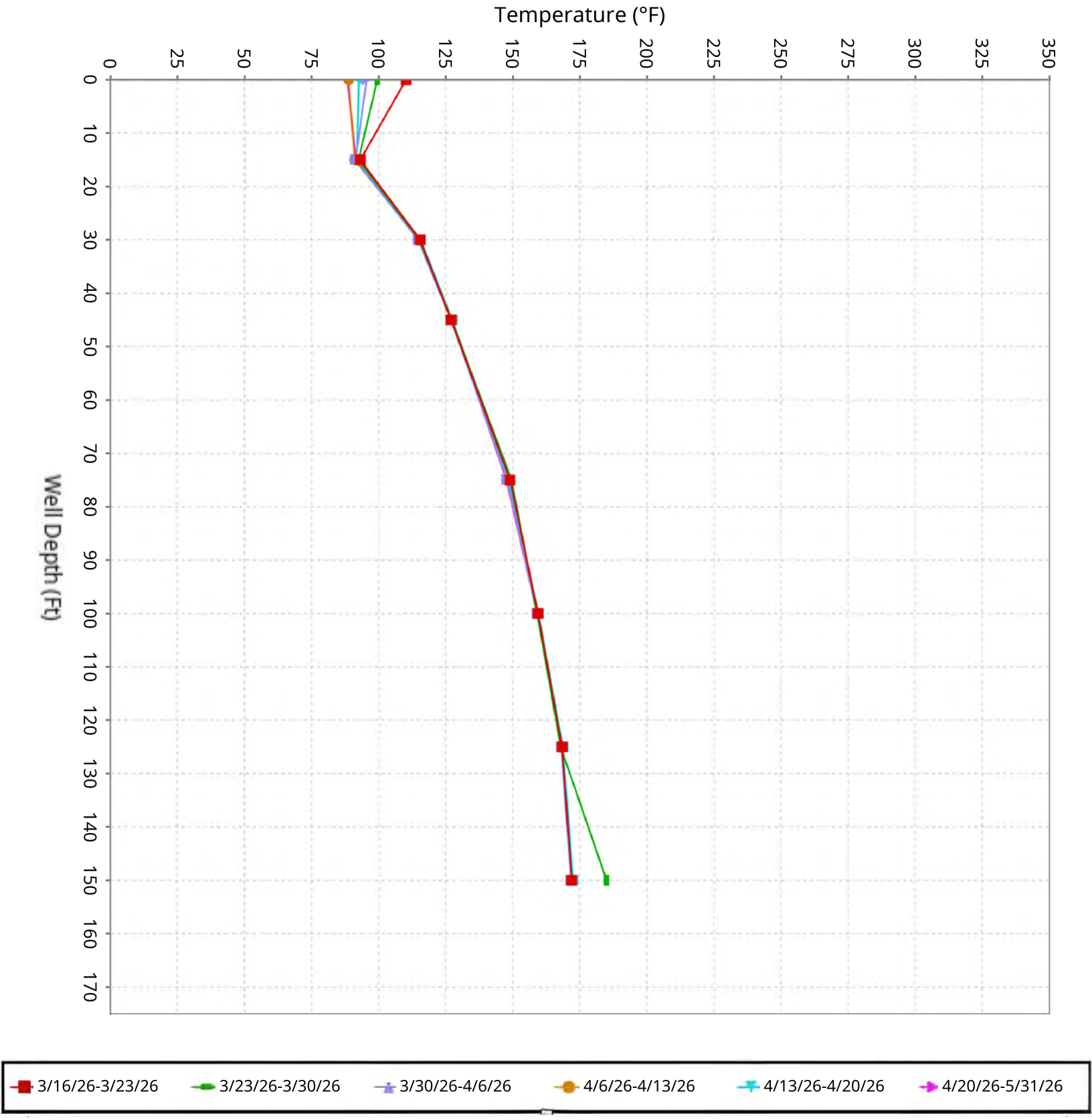

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-15

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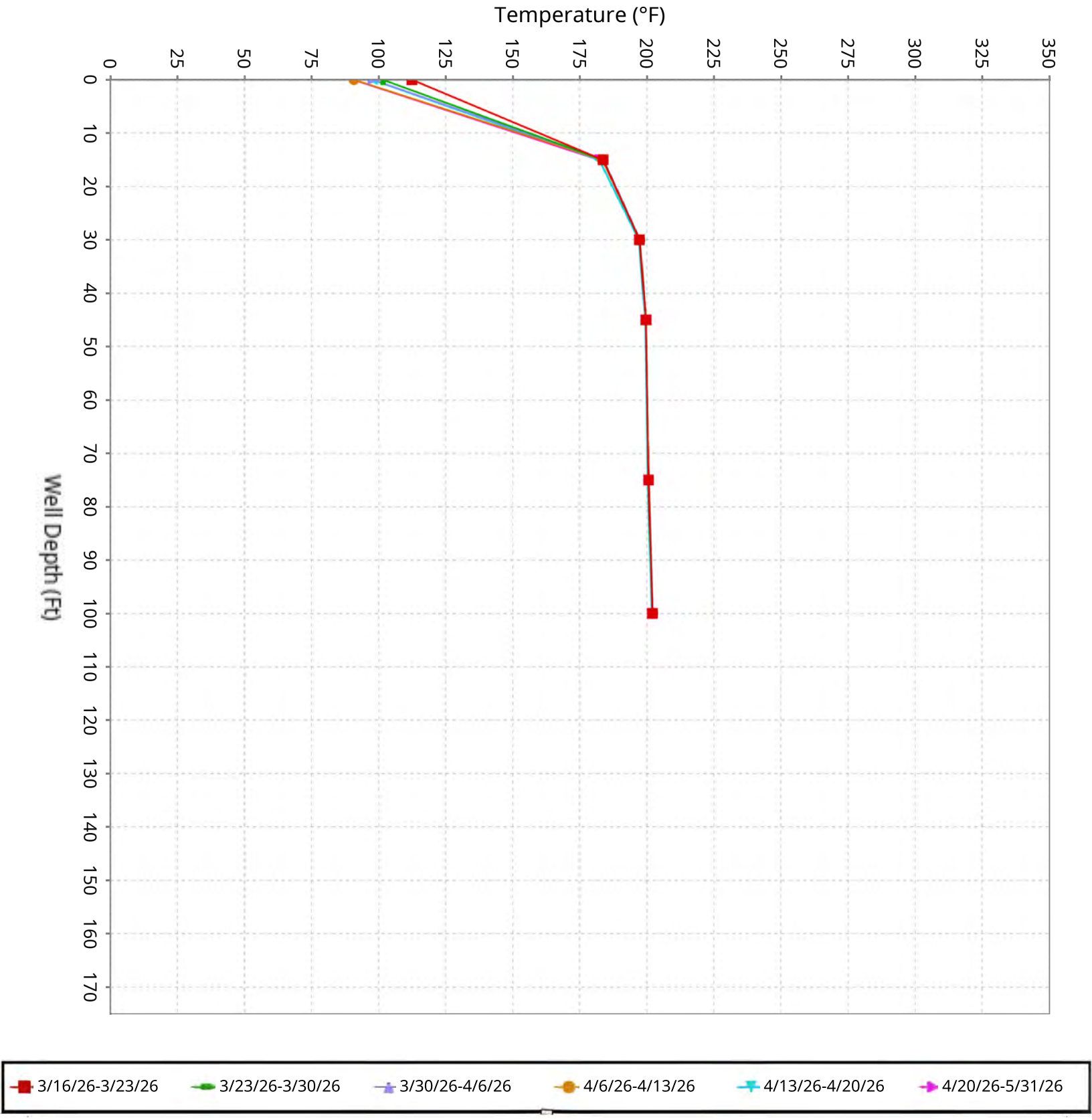

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-16

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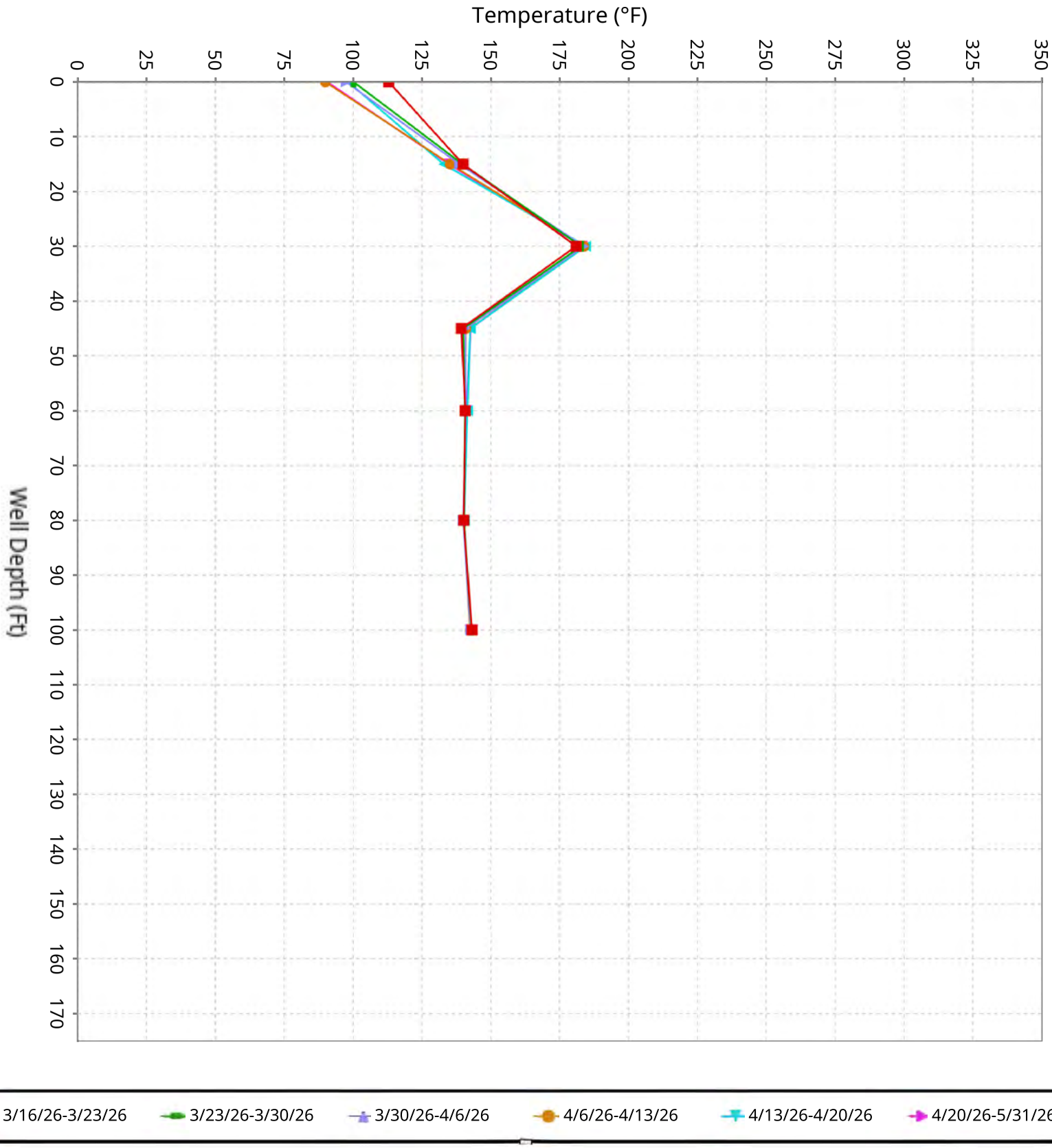

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-17

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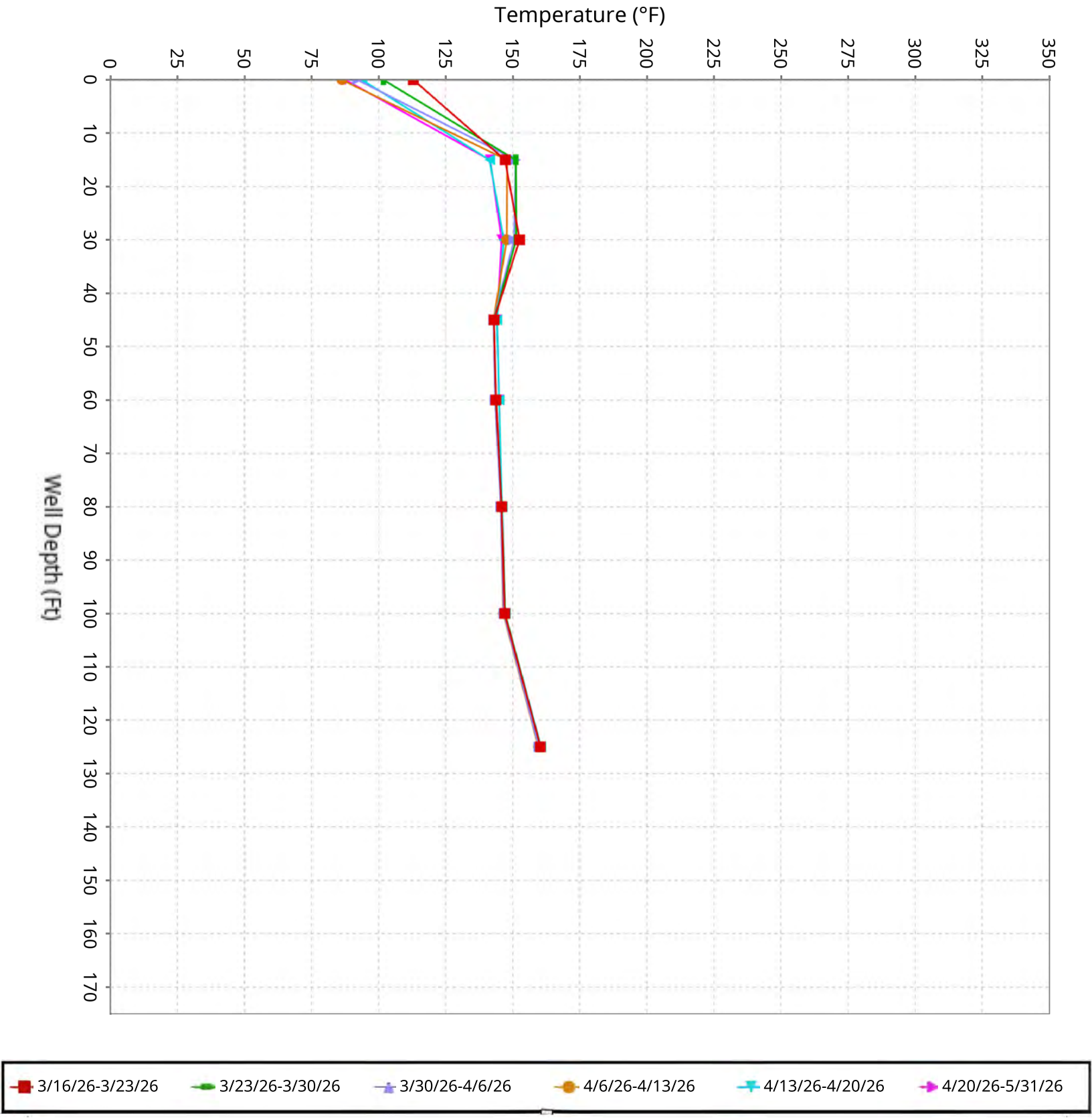

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-18

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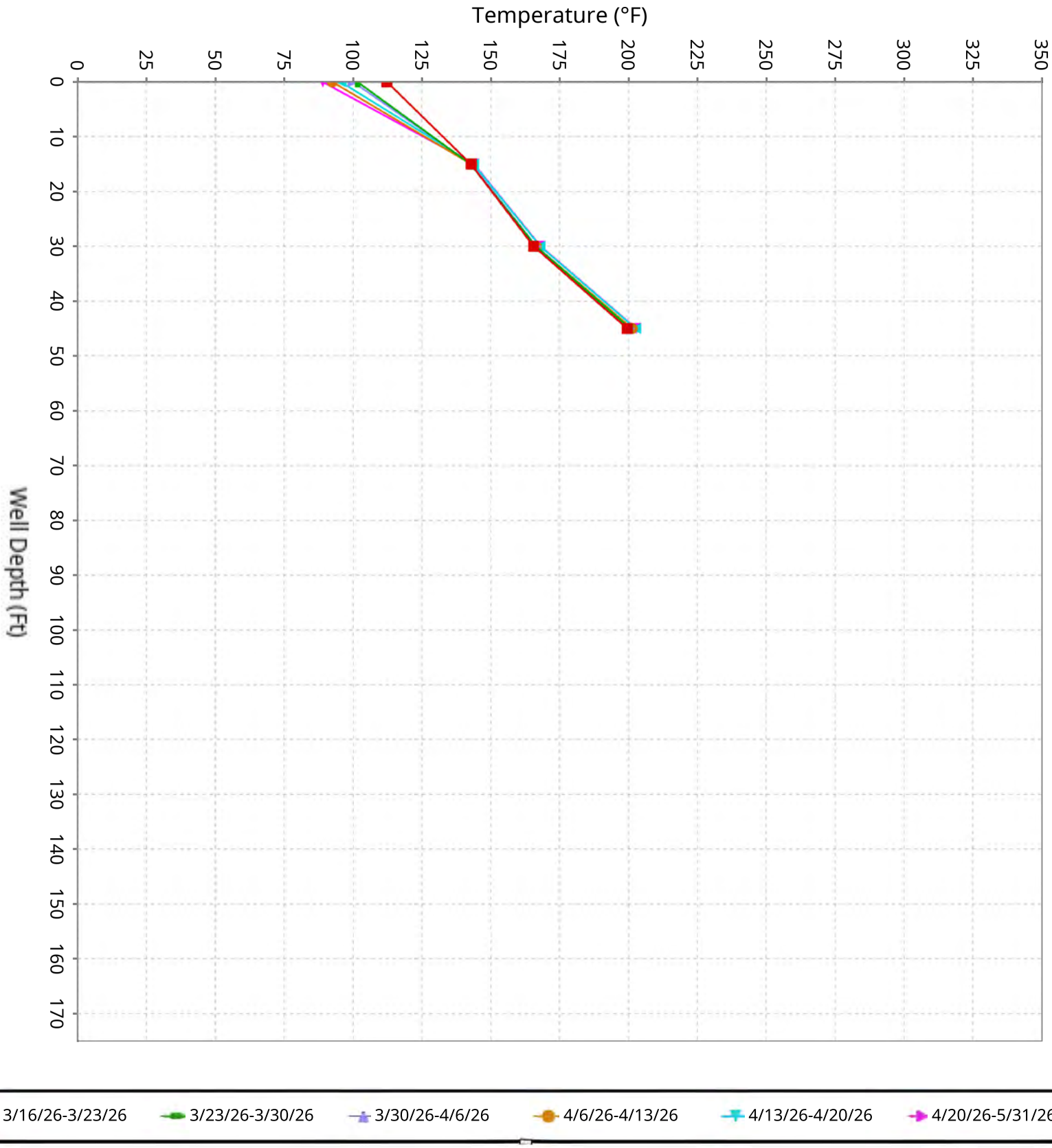

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-19

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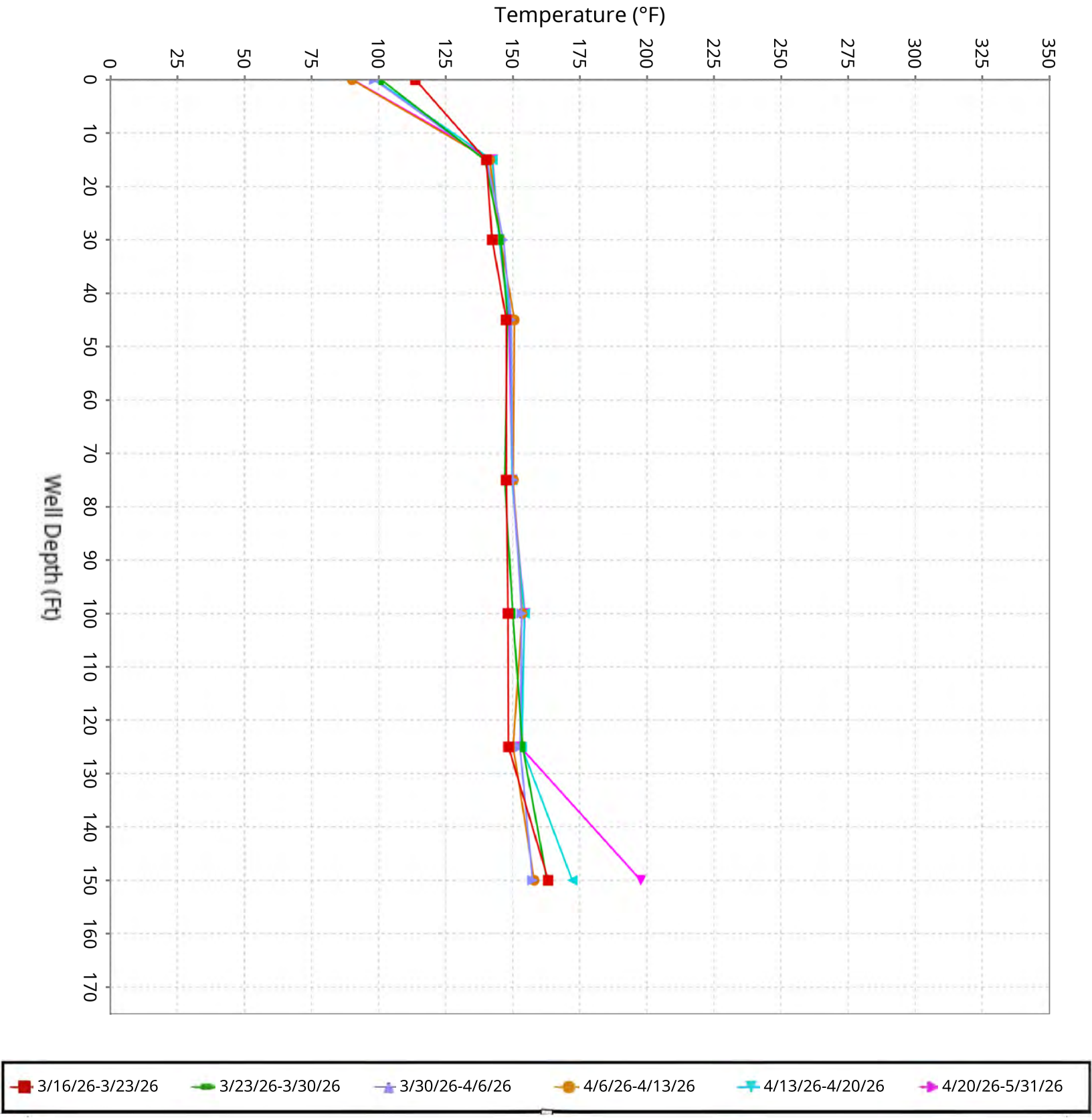

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-20

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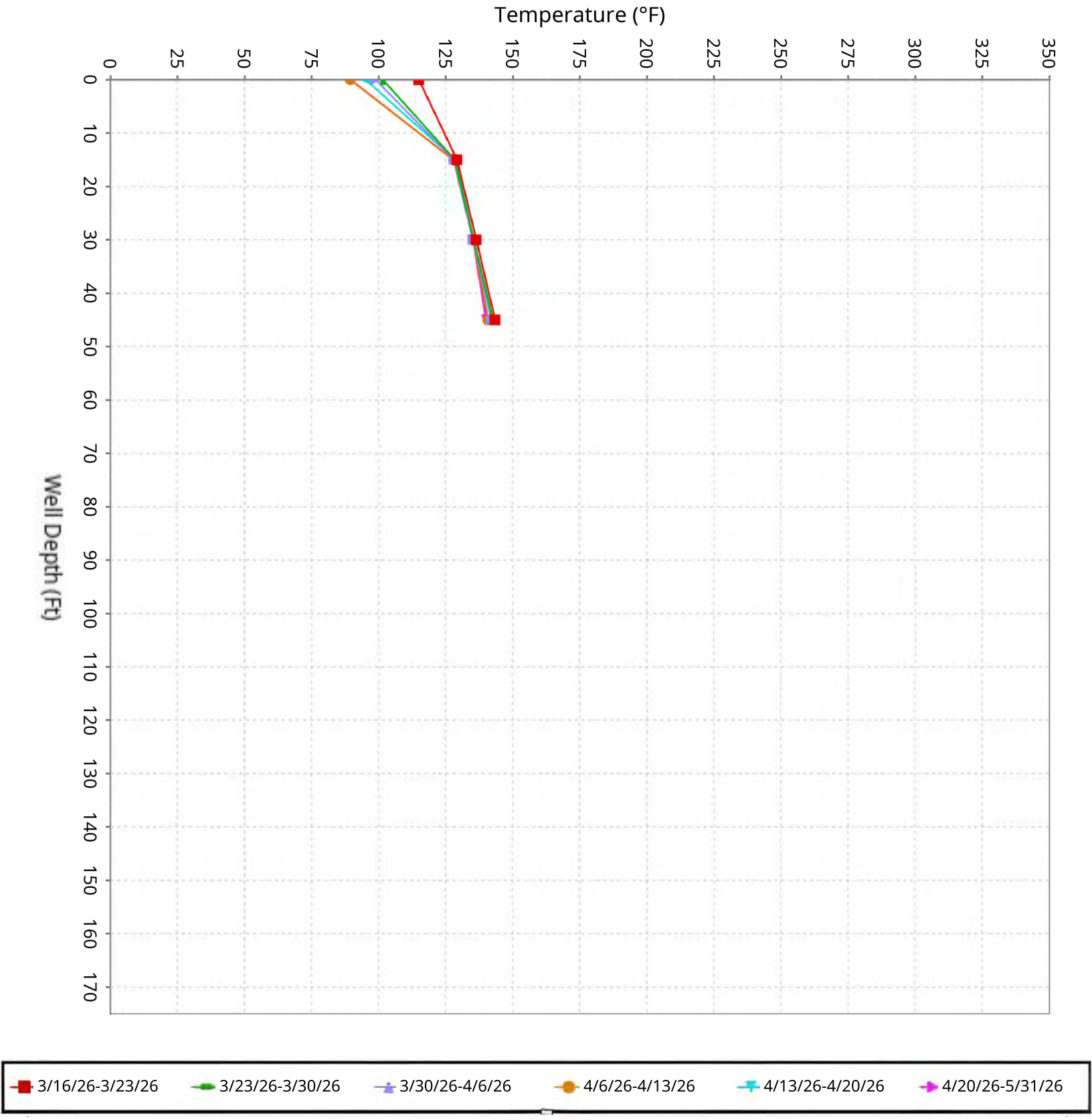

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-21

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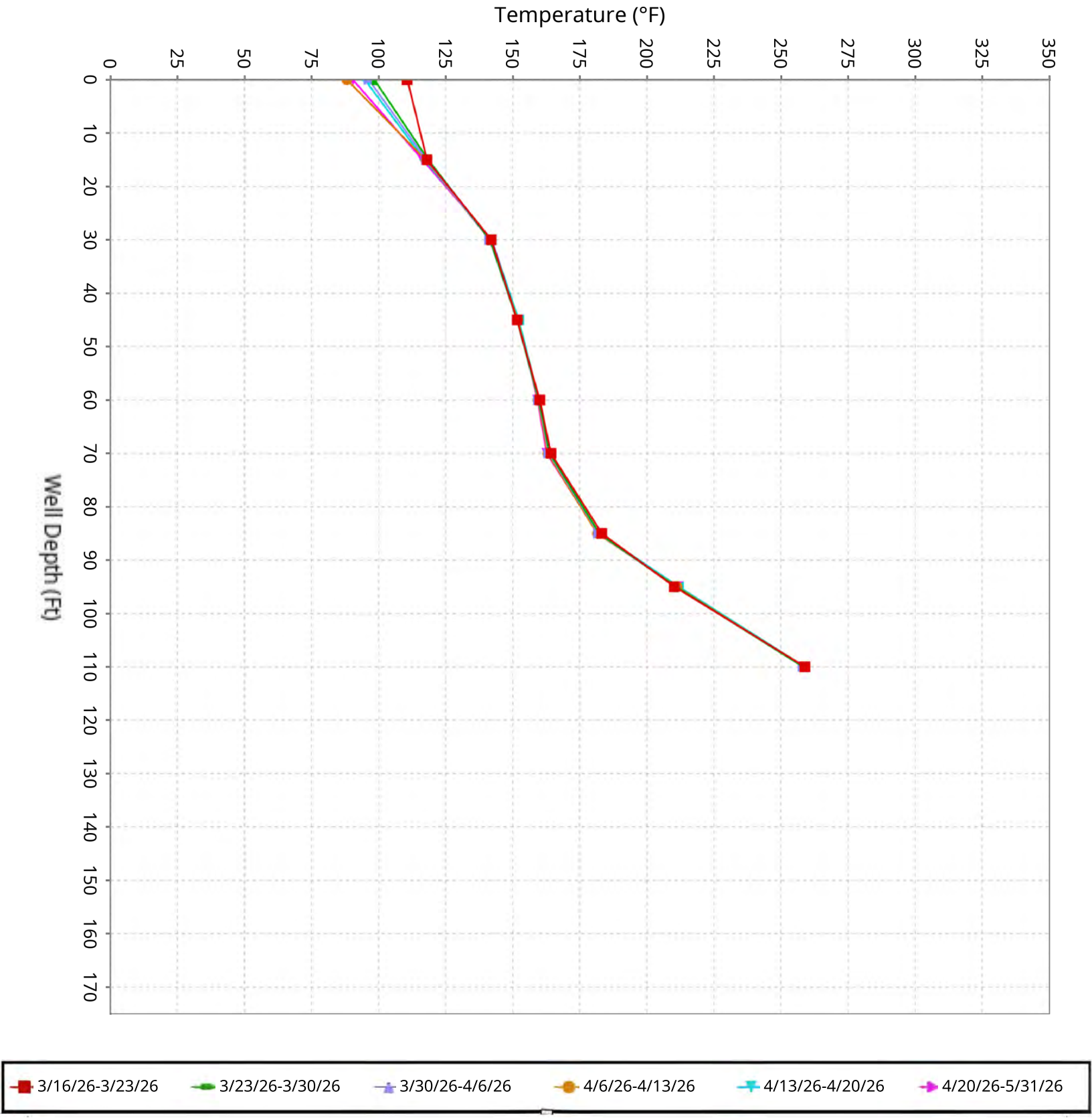

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-22

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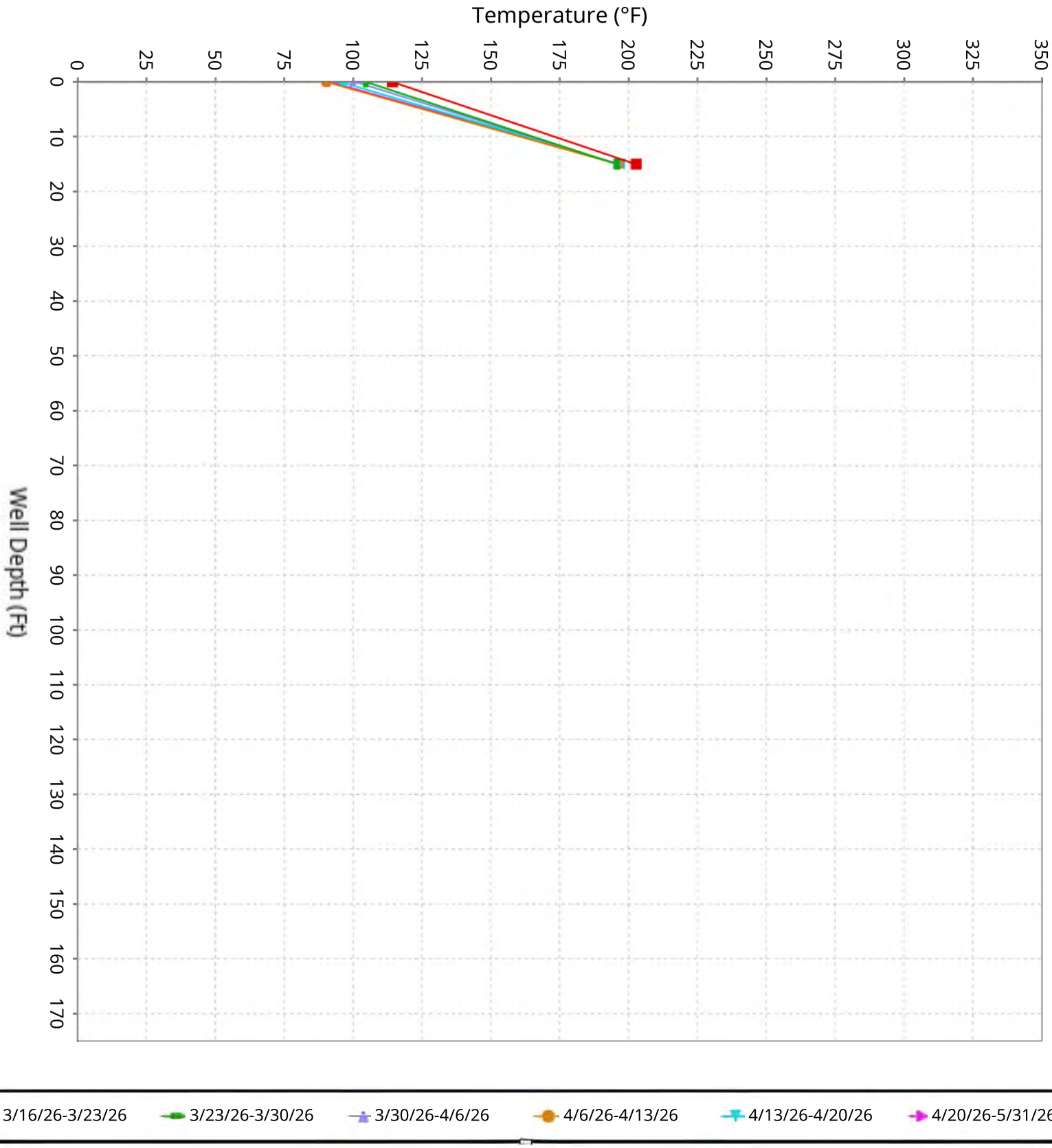

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-23

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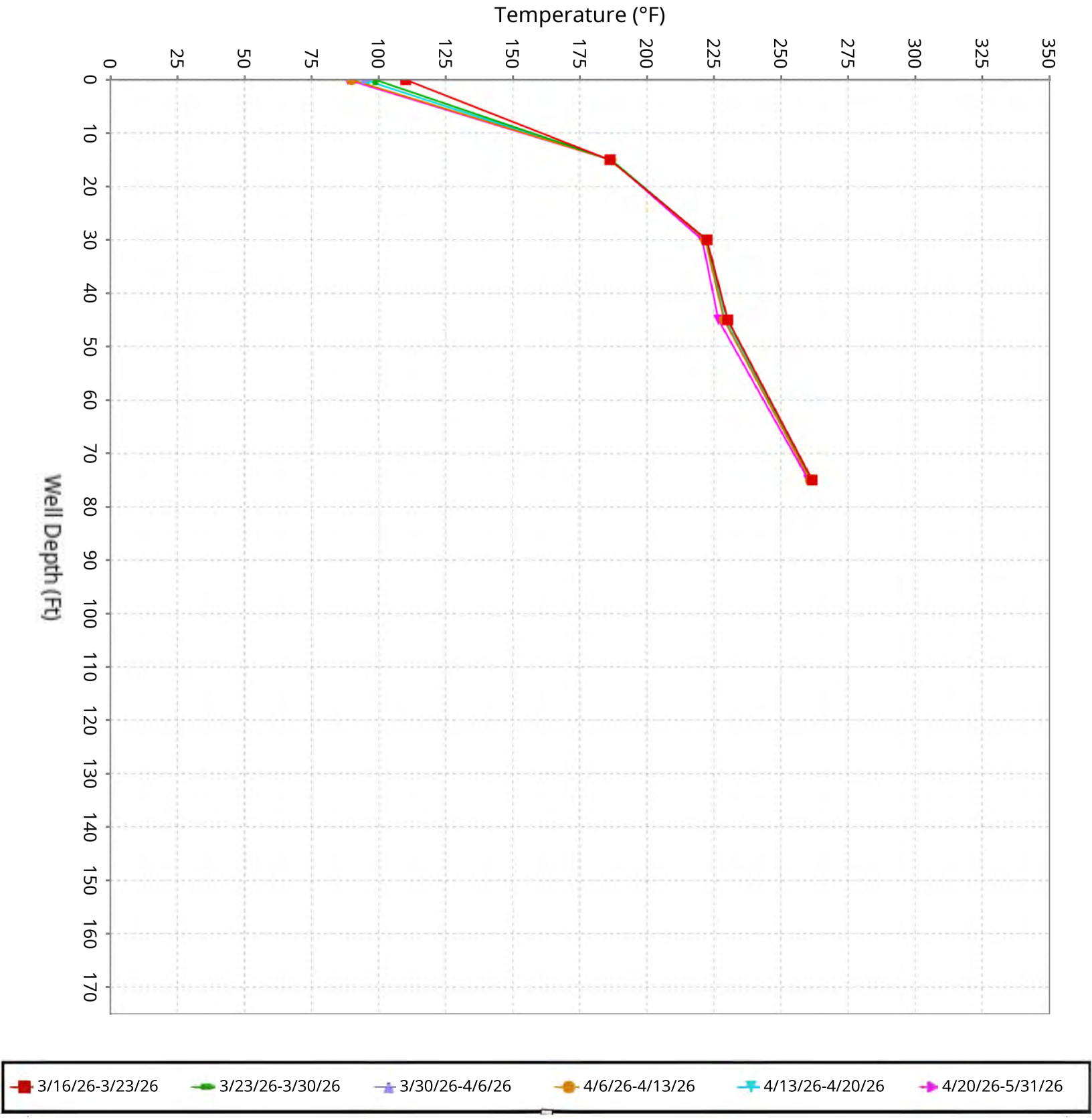

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-24

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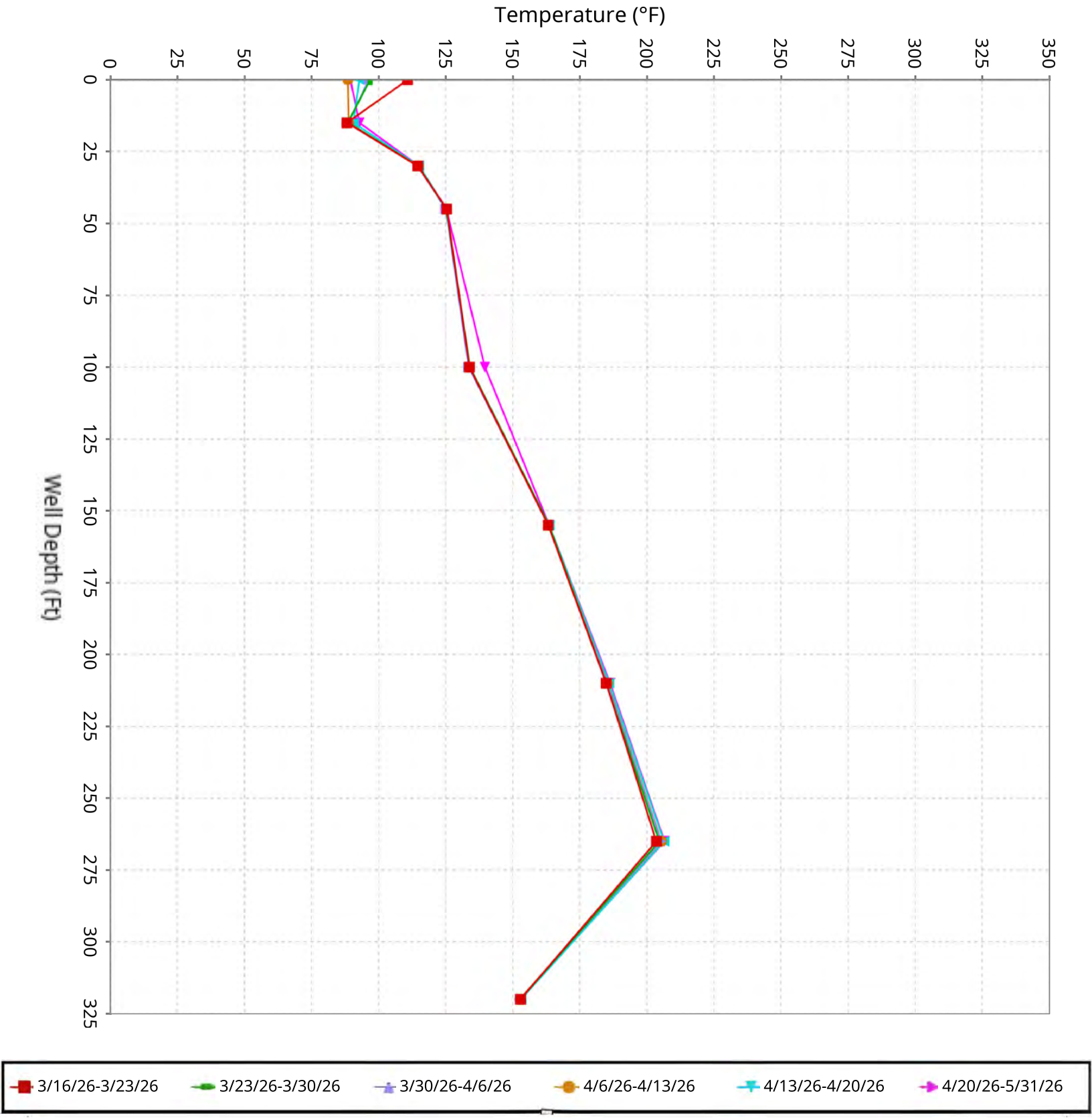

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-25

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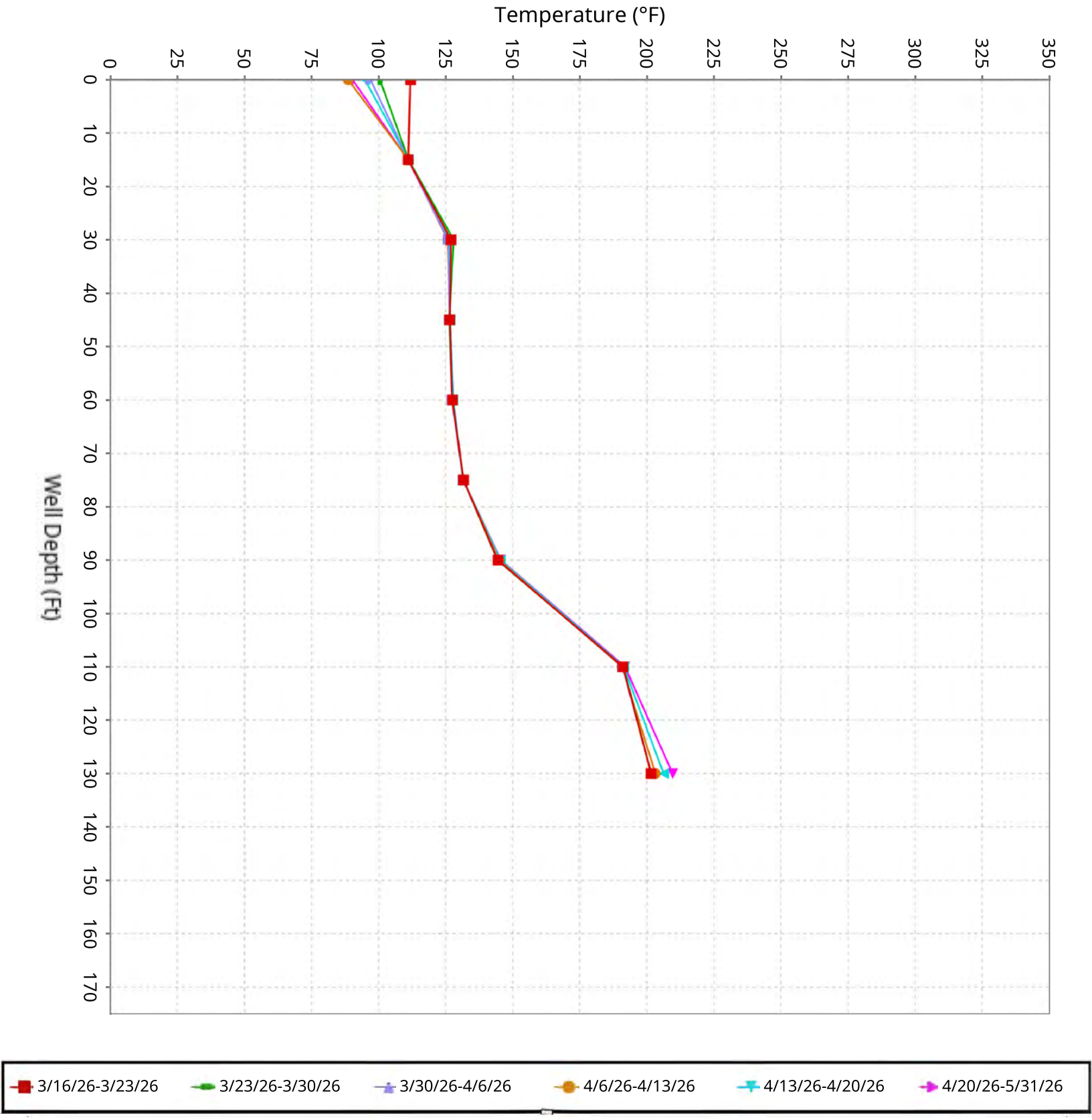

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-26

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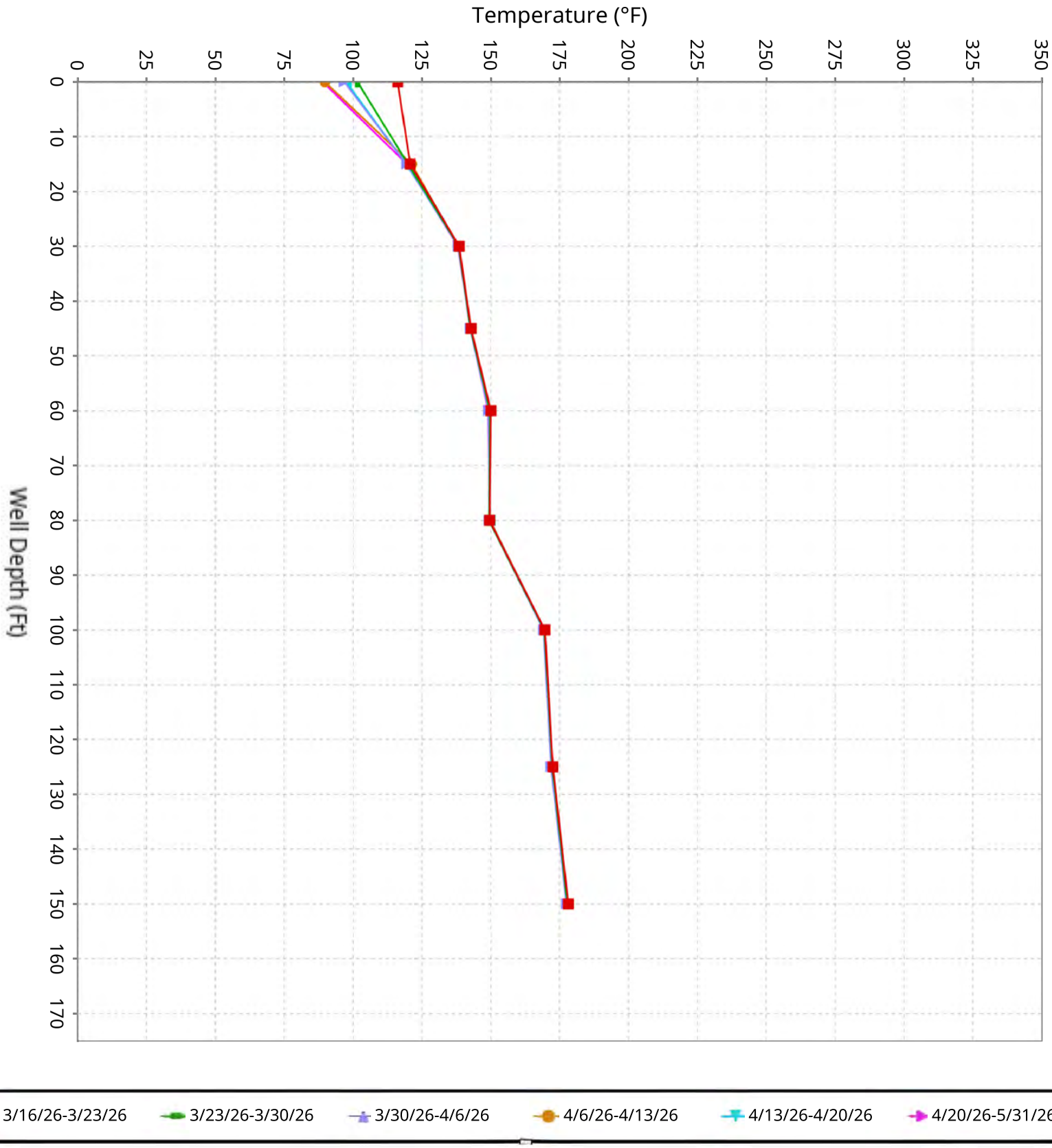

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-27

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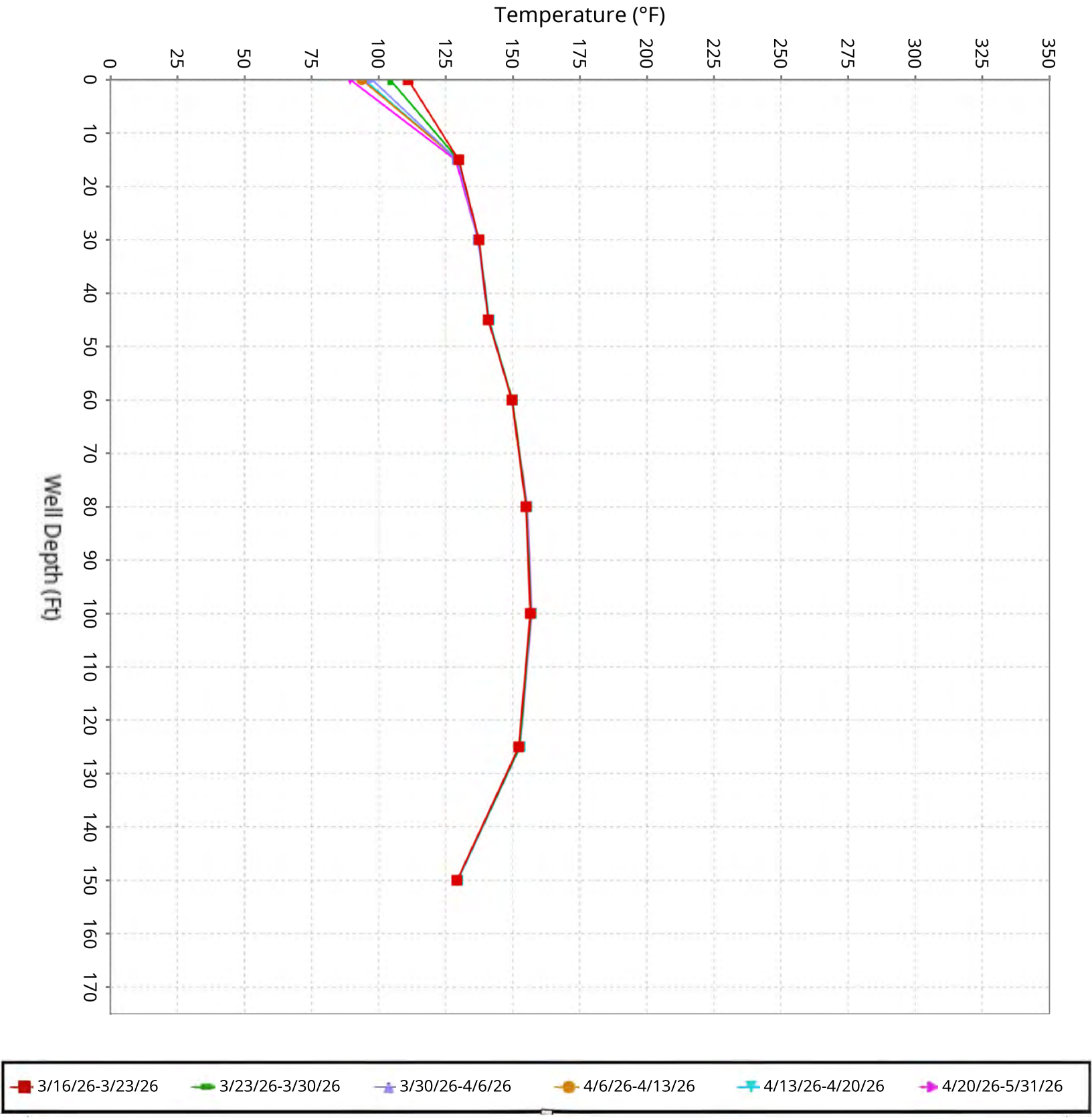

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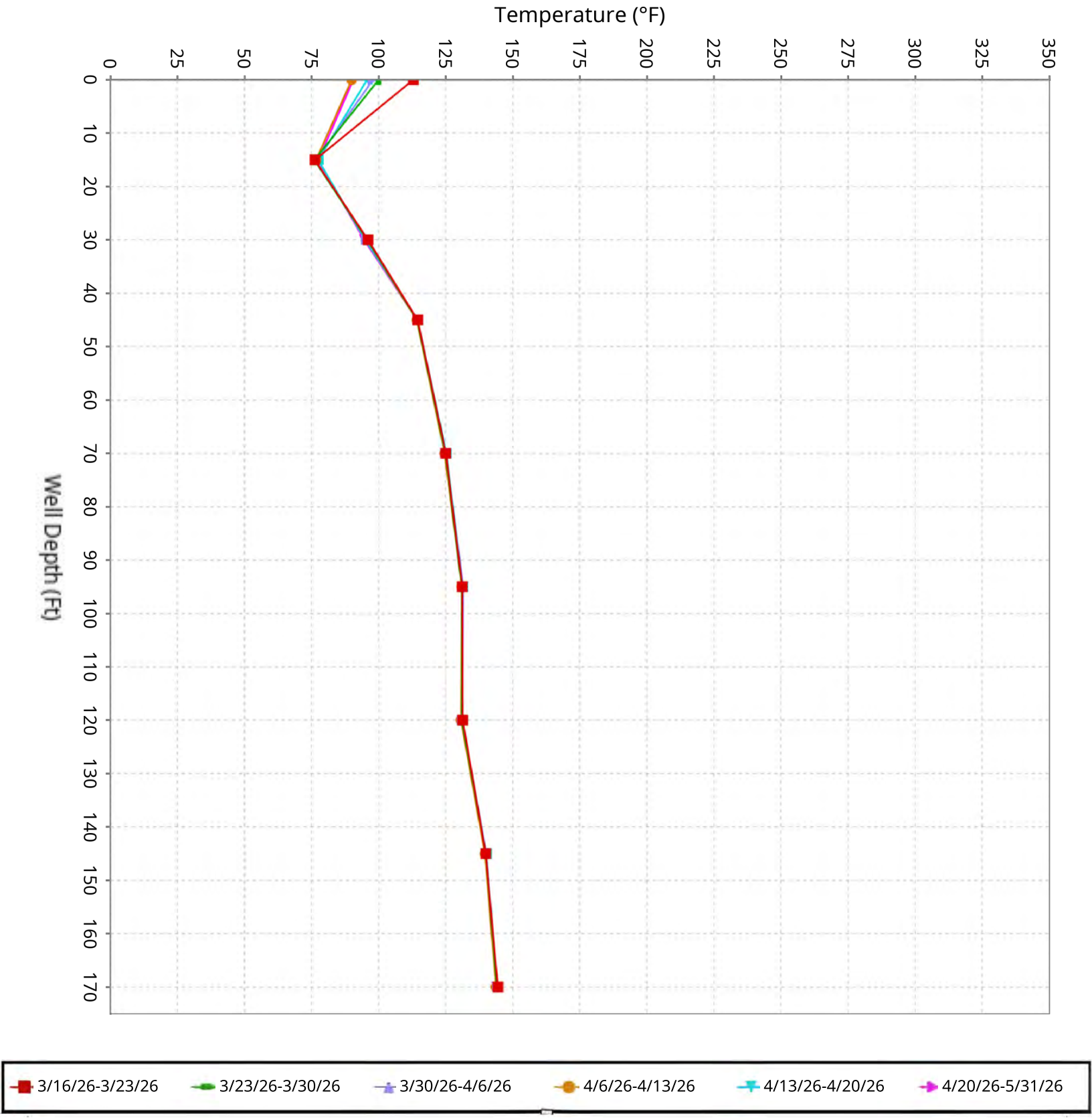
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-28

Maximum data for 3/16/2026 12:00 AM to 5/31/2026 12:00 AM



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

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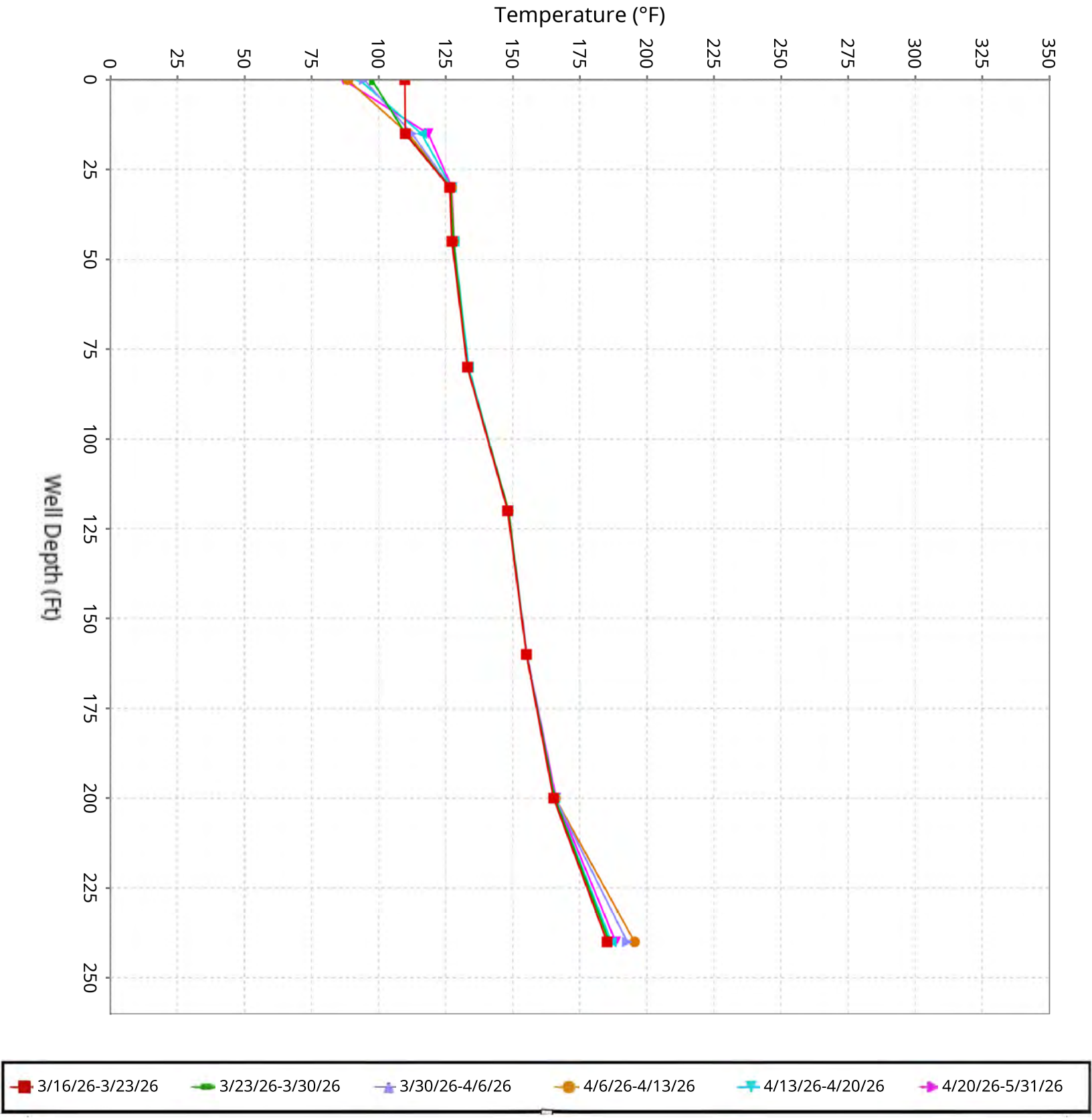

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-30

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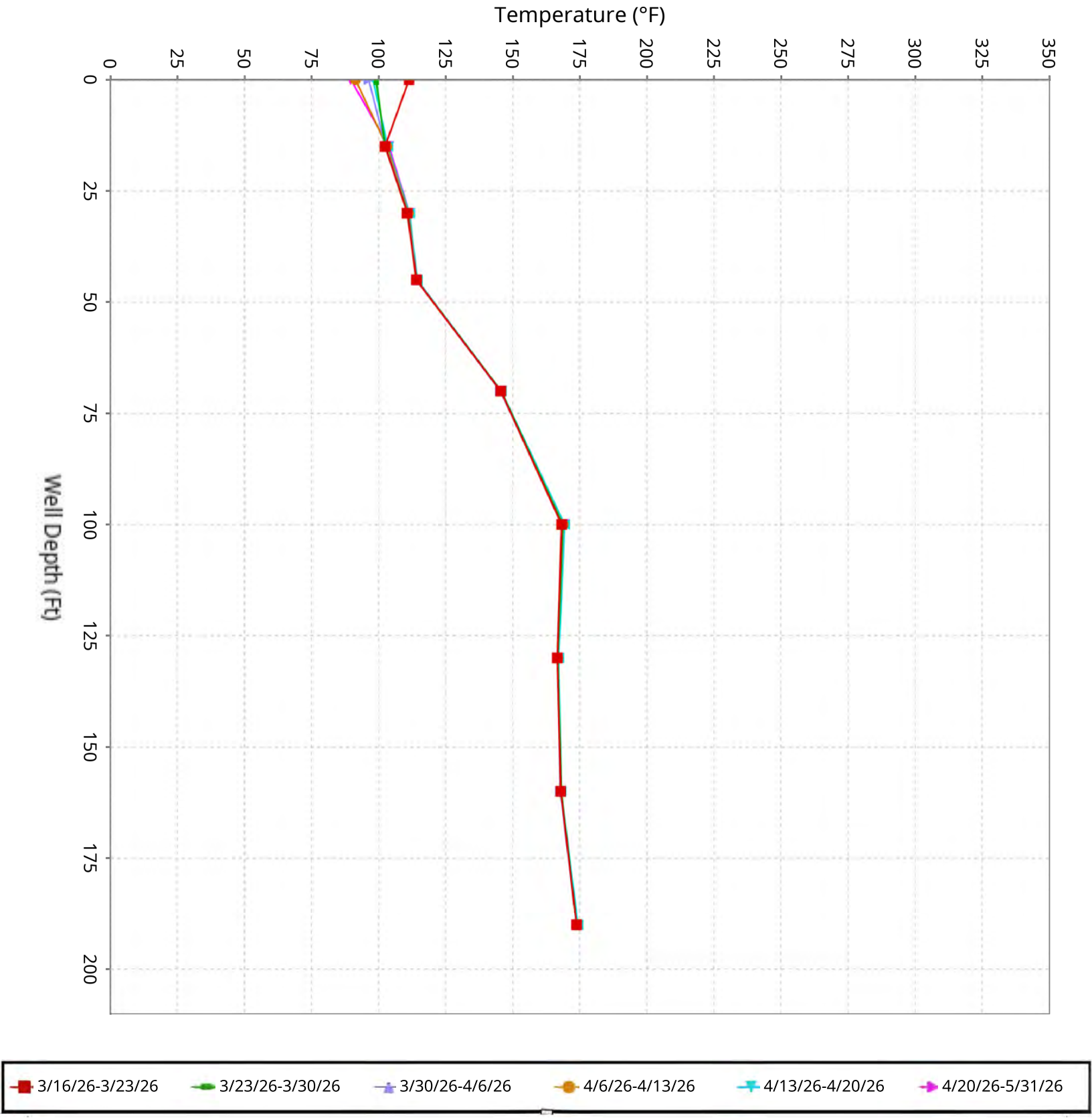

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-31

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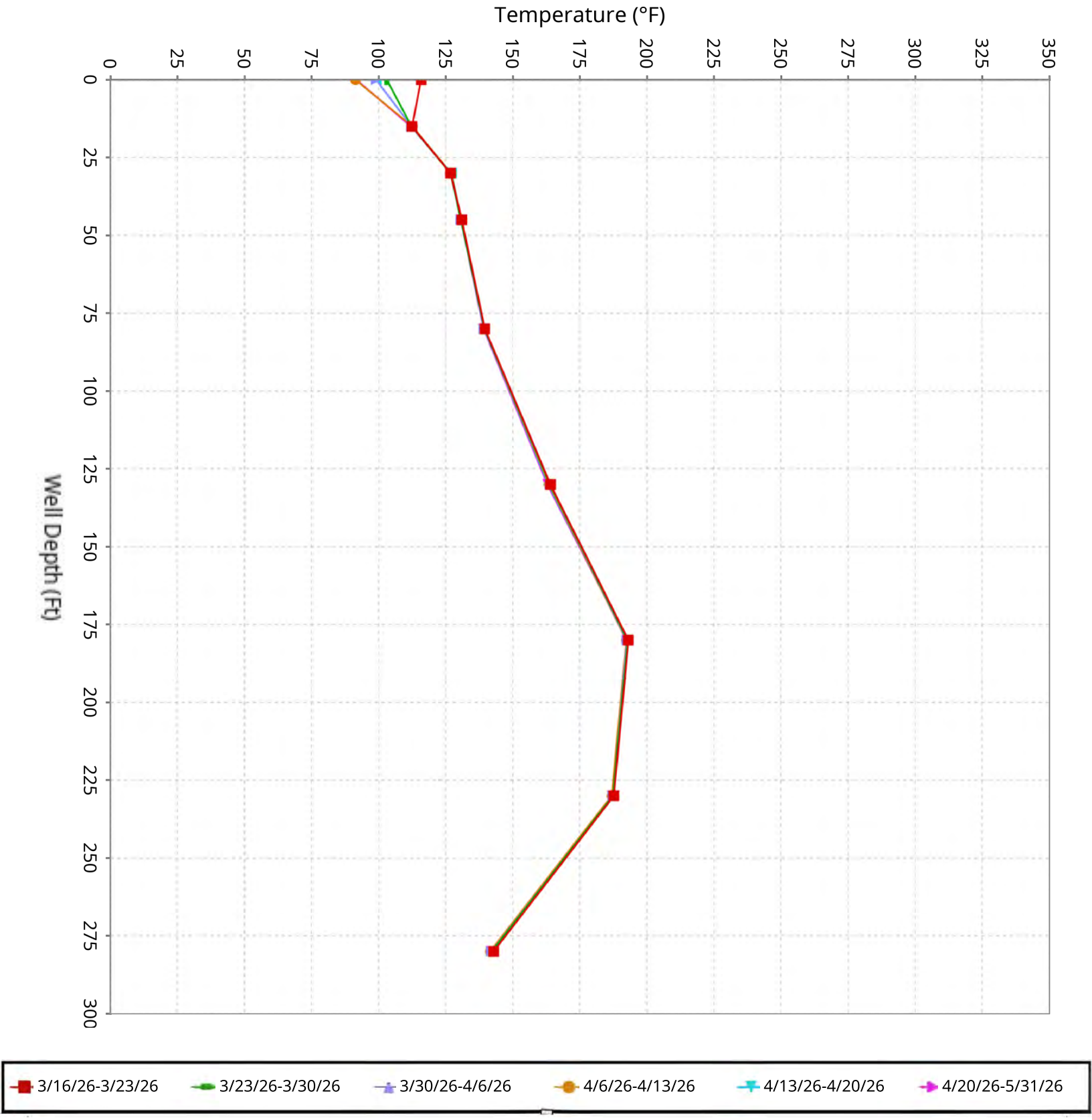

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-32

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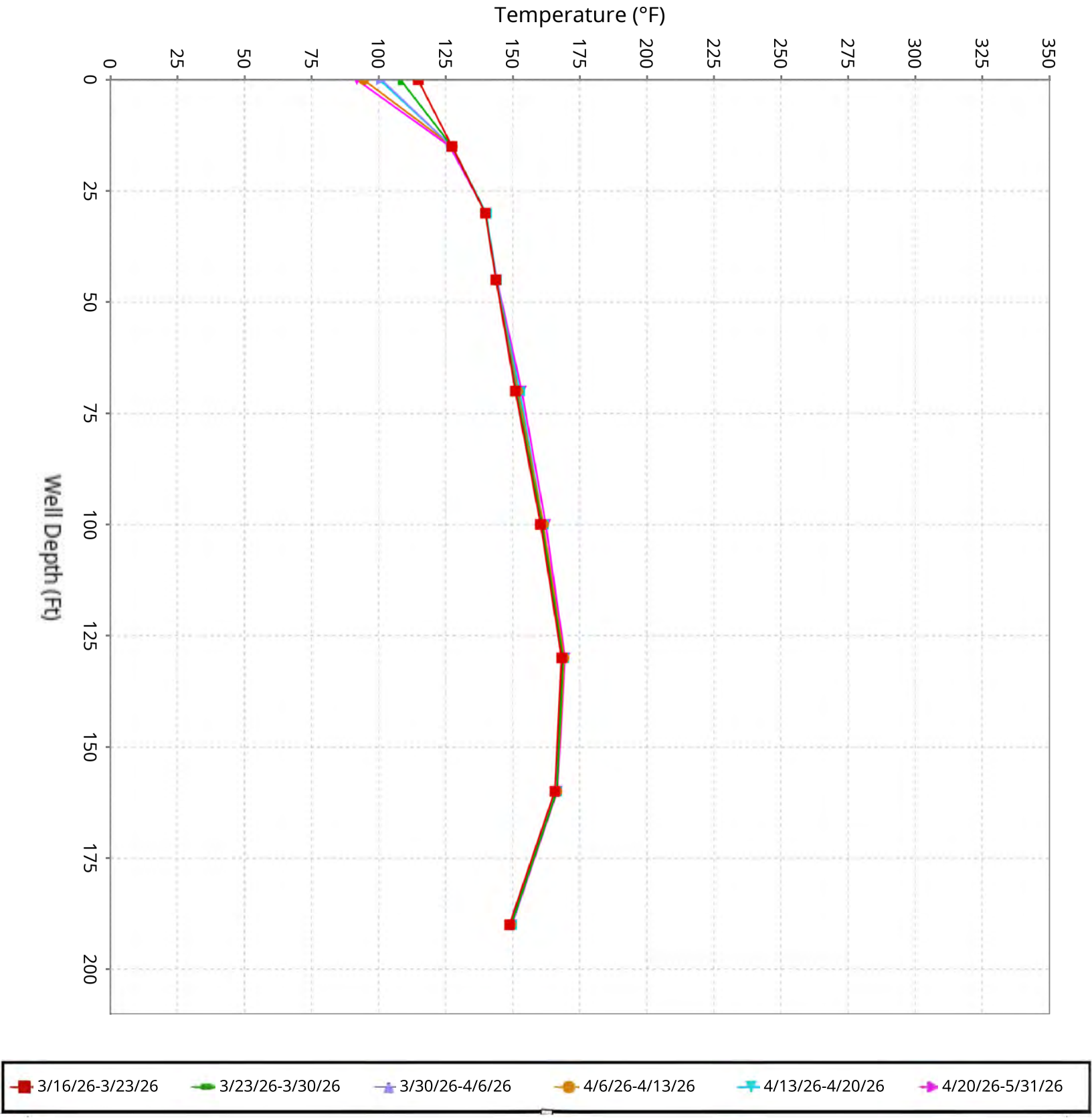

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Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-33

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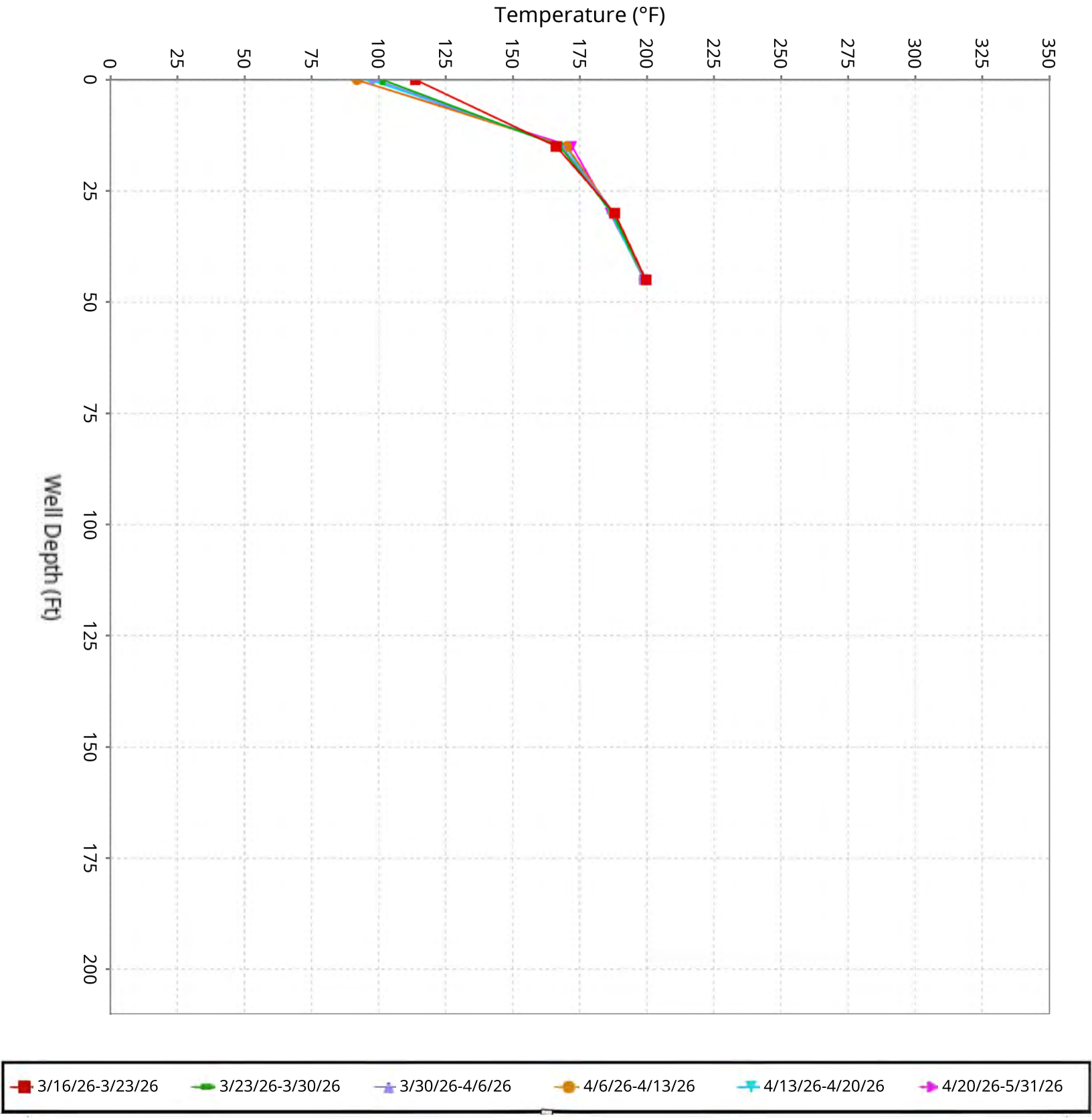

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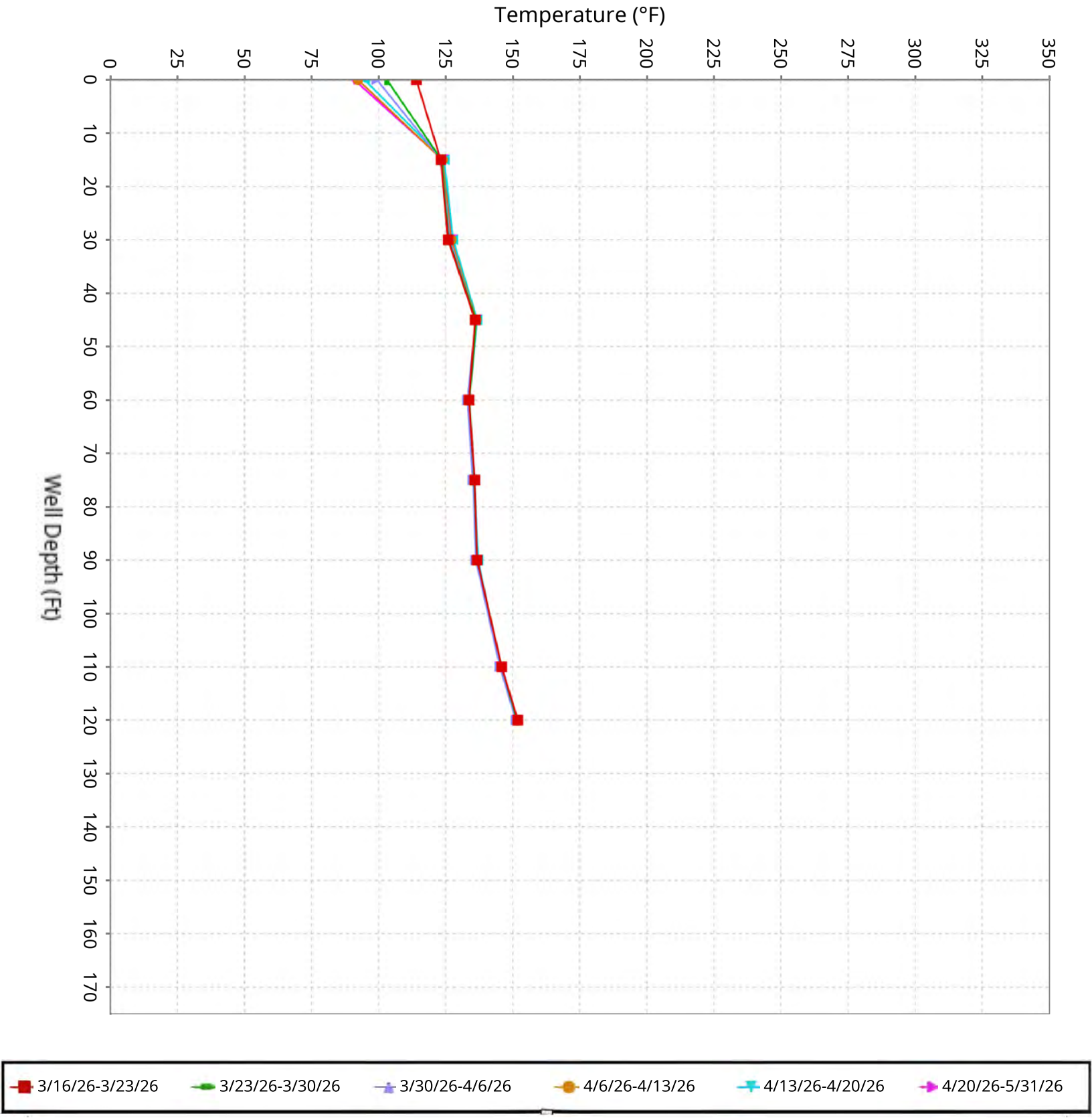
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-34

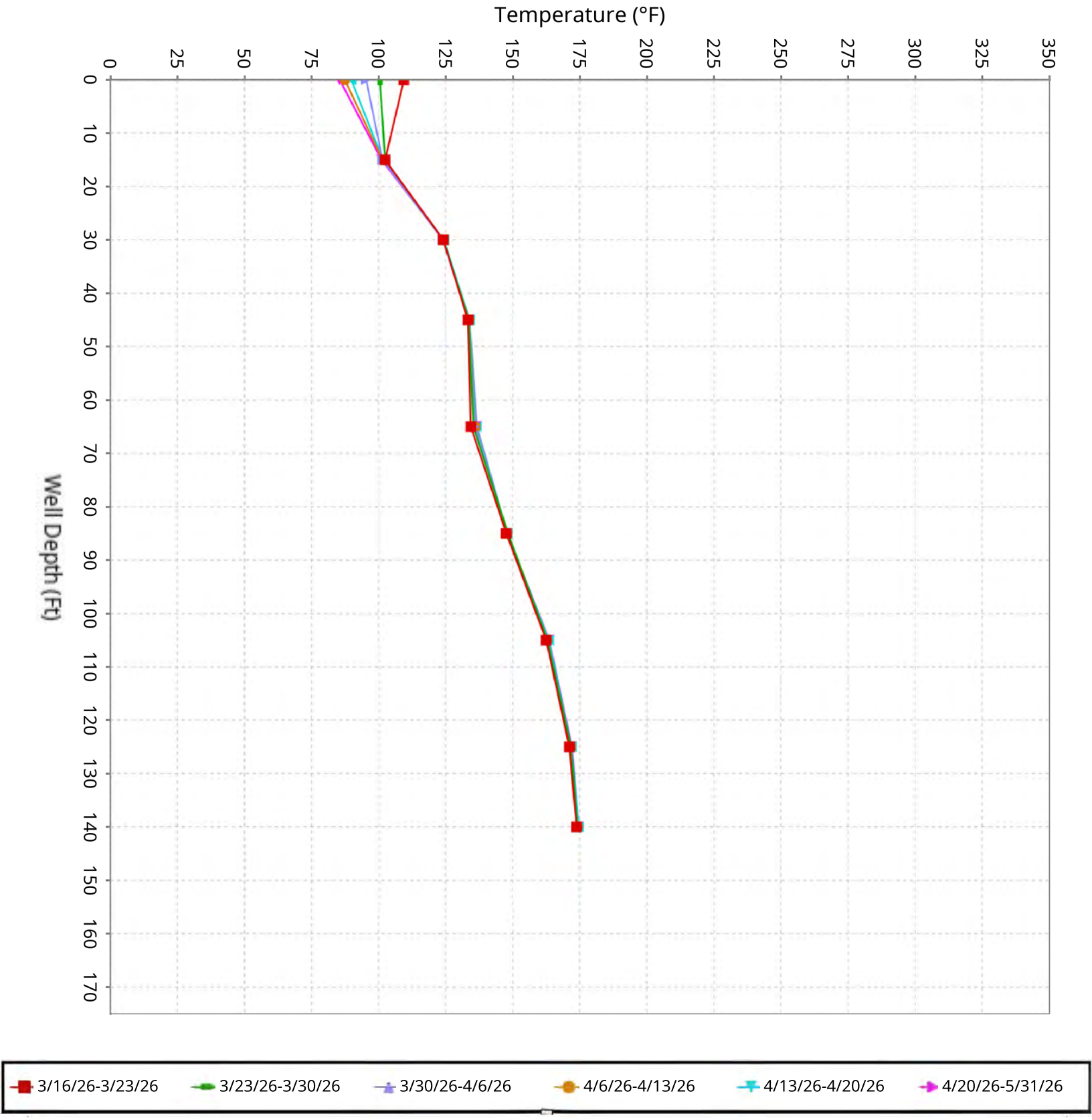
Maximum data for 3/16/2026 12:00 AM to 5/31/2026 12:00 AM



SCS ENGINEERS

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

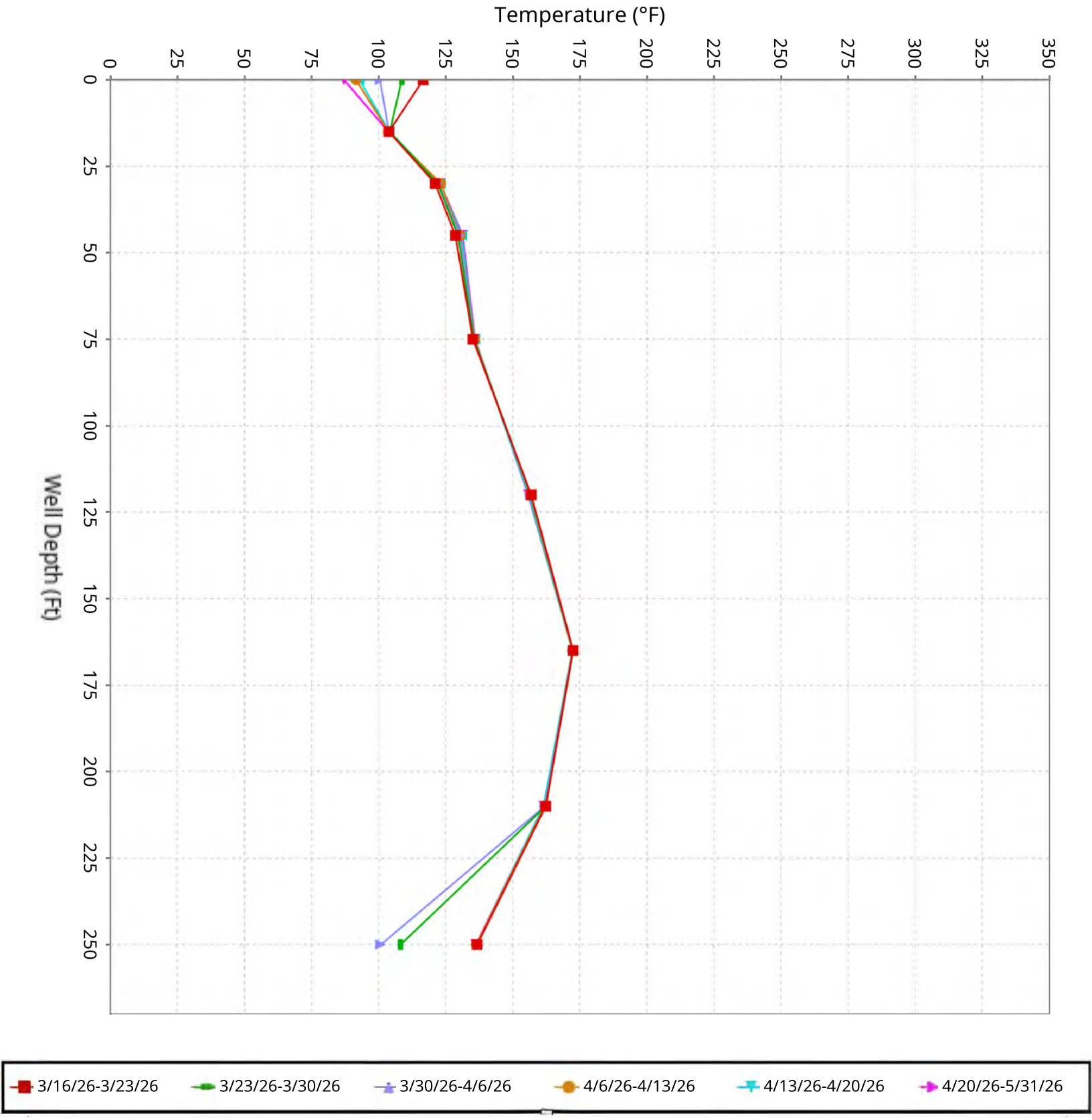
Maximum data for 3/16/2026 12:00 AM to 5/31/2026 12:00 AM



SCS ENGINEERS

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

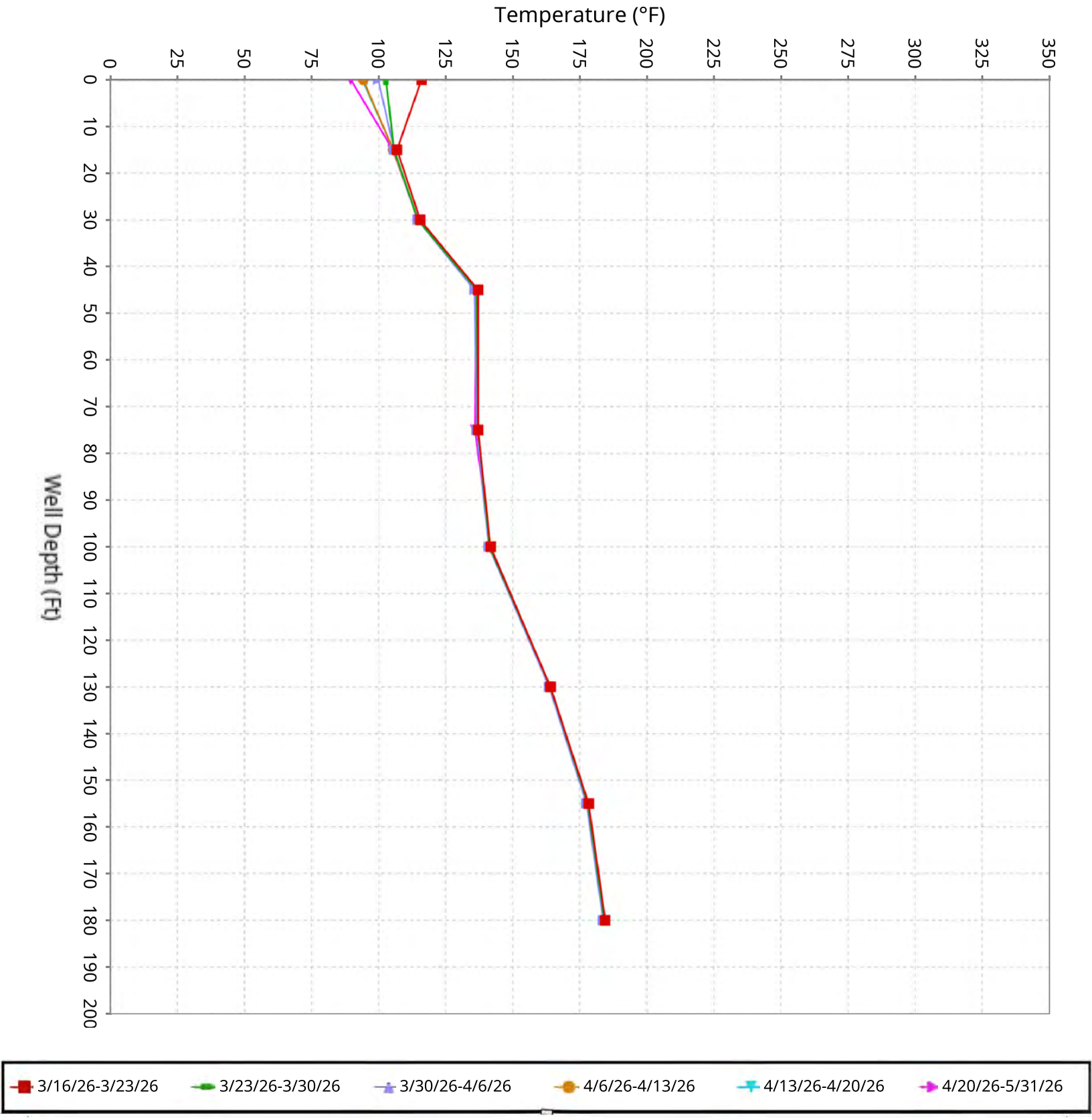
Maximum data for 3/16/2026 12:00 AM to 5/31/2026 12:00 AM



SCS ENGINEERS

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

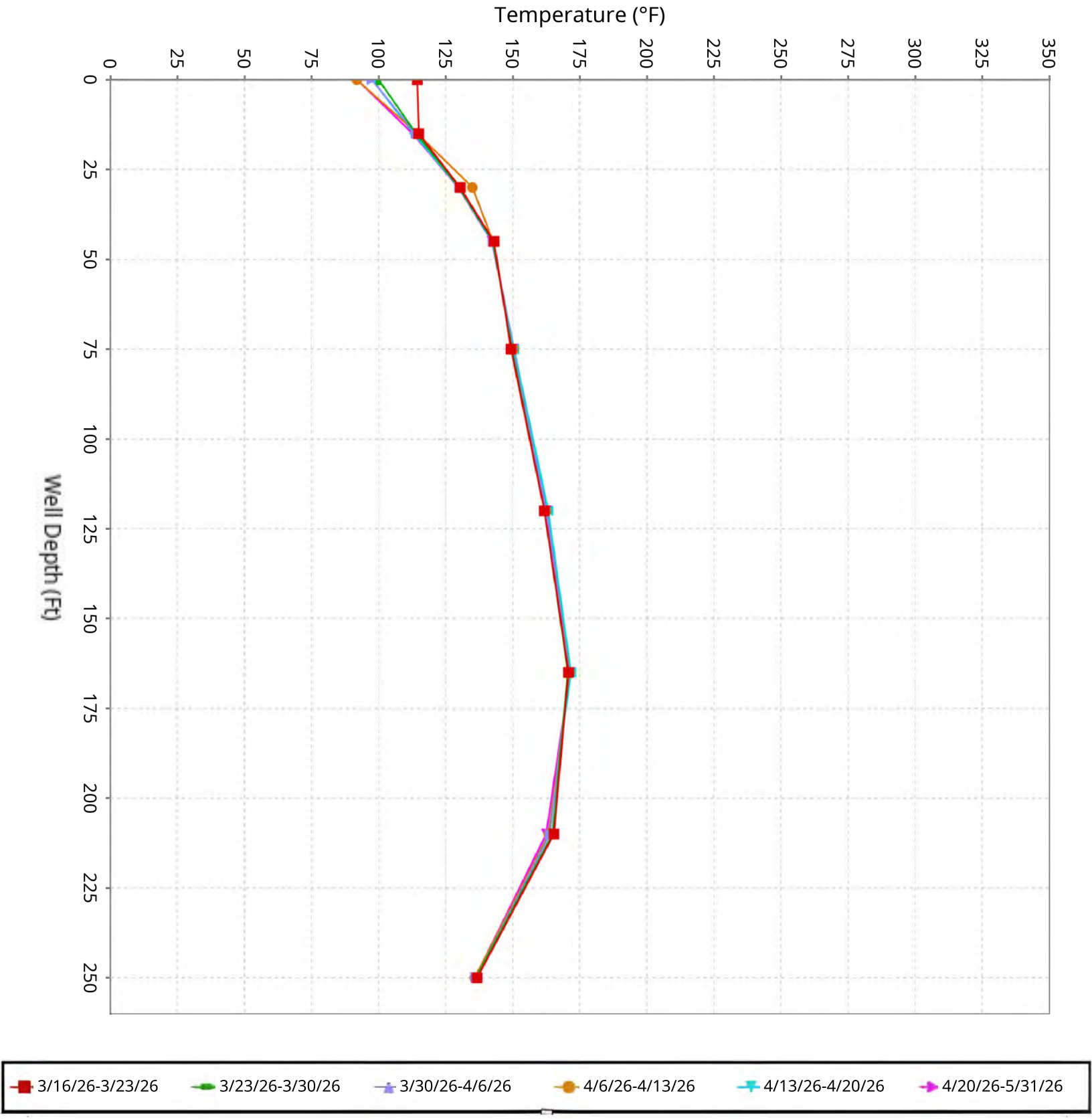
Maximum data for 3/16/2026 12:00 AM to 5/31/2026 12:00 AM



SCS ENGINEERS

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

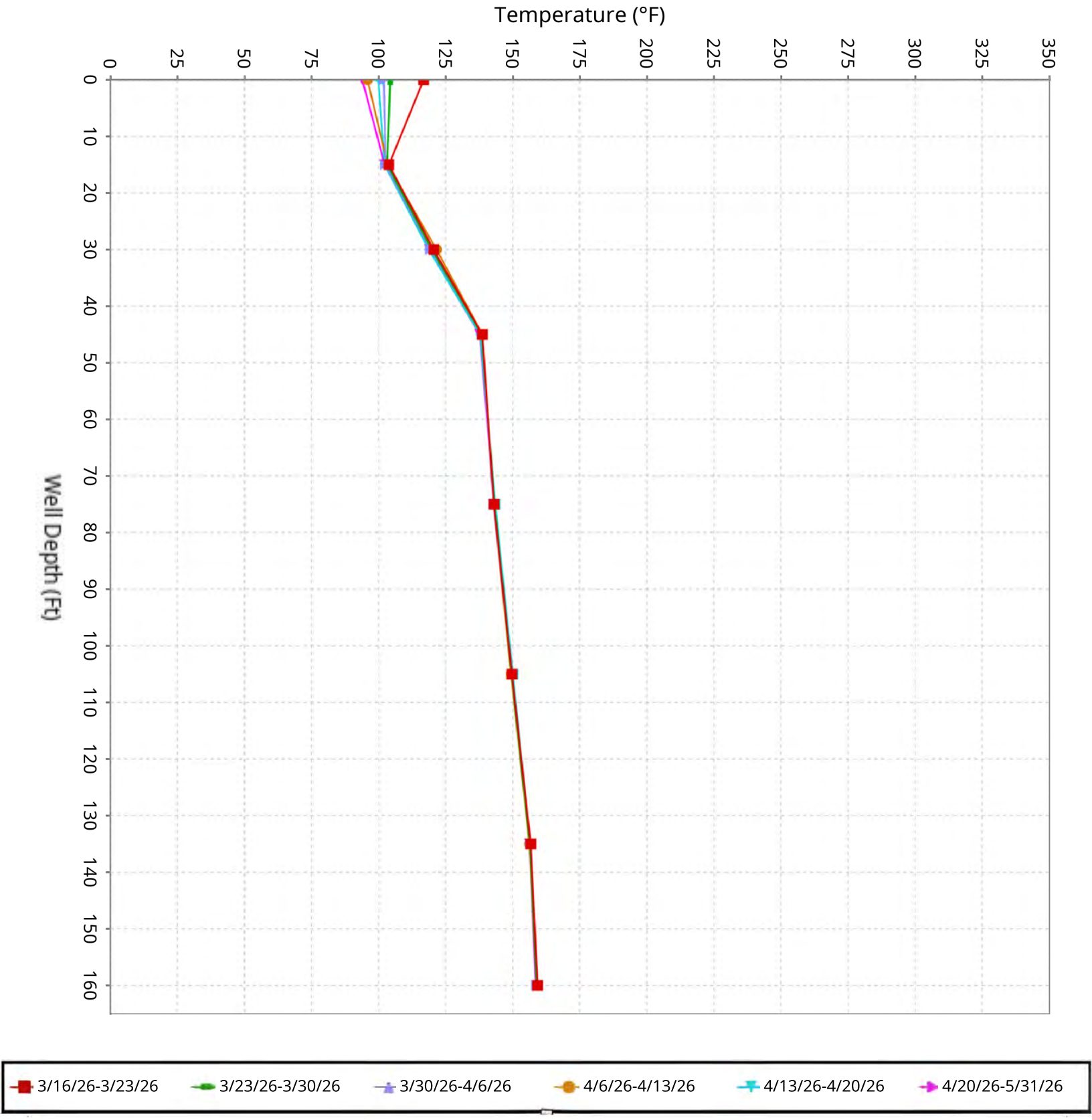
Maximum data for 3/16/2026 12:00 AM to 5/31/2026 12:00 AM



SCS ENGINEERS

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

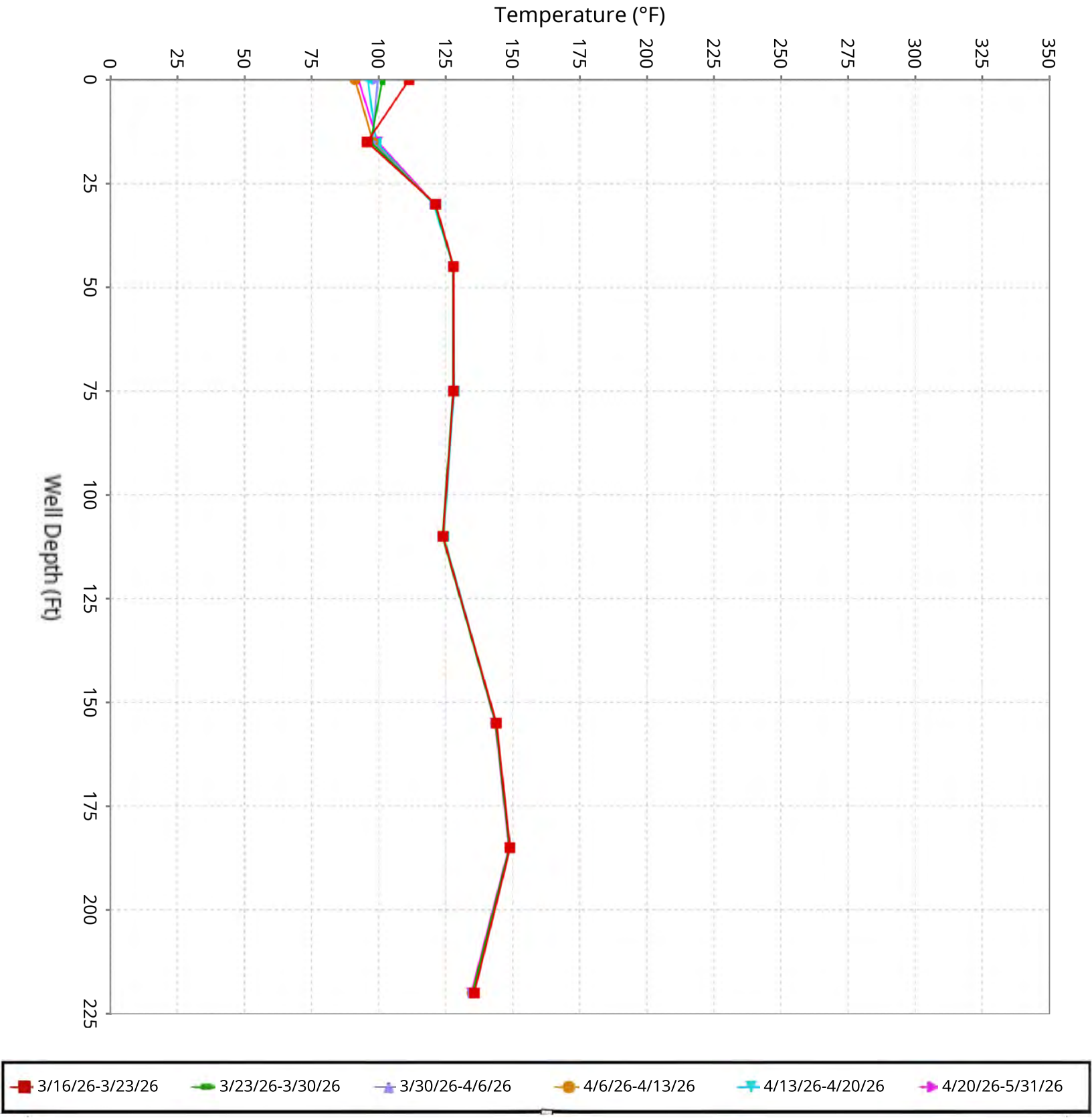
Maximum data for 3/16/2026 12:00 AM to 5/31/2026 12:00 AM



SCS ENGINEERS

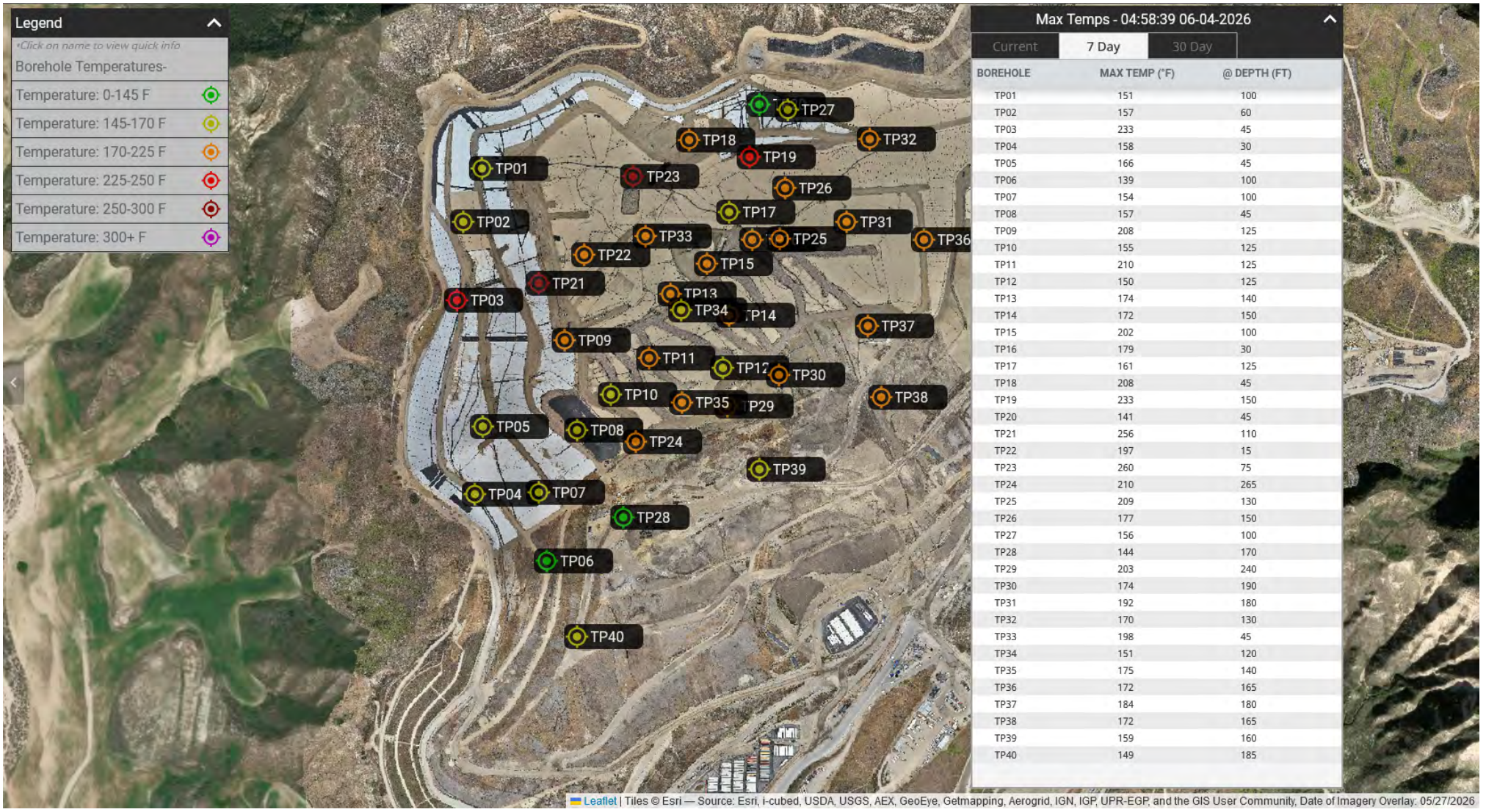
Vertical Temperature Profiles from Temperature Probes at Chiquita Landfill for TP-40

Maximum data for 3/16/2026 12:00 AM to 5/31/2026 12:00 AM



SCS ENGINEERS

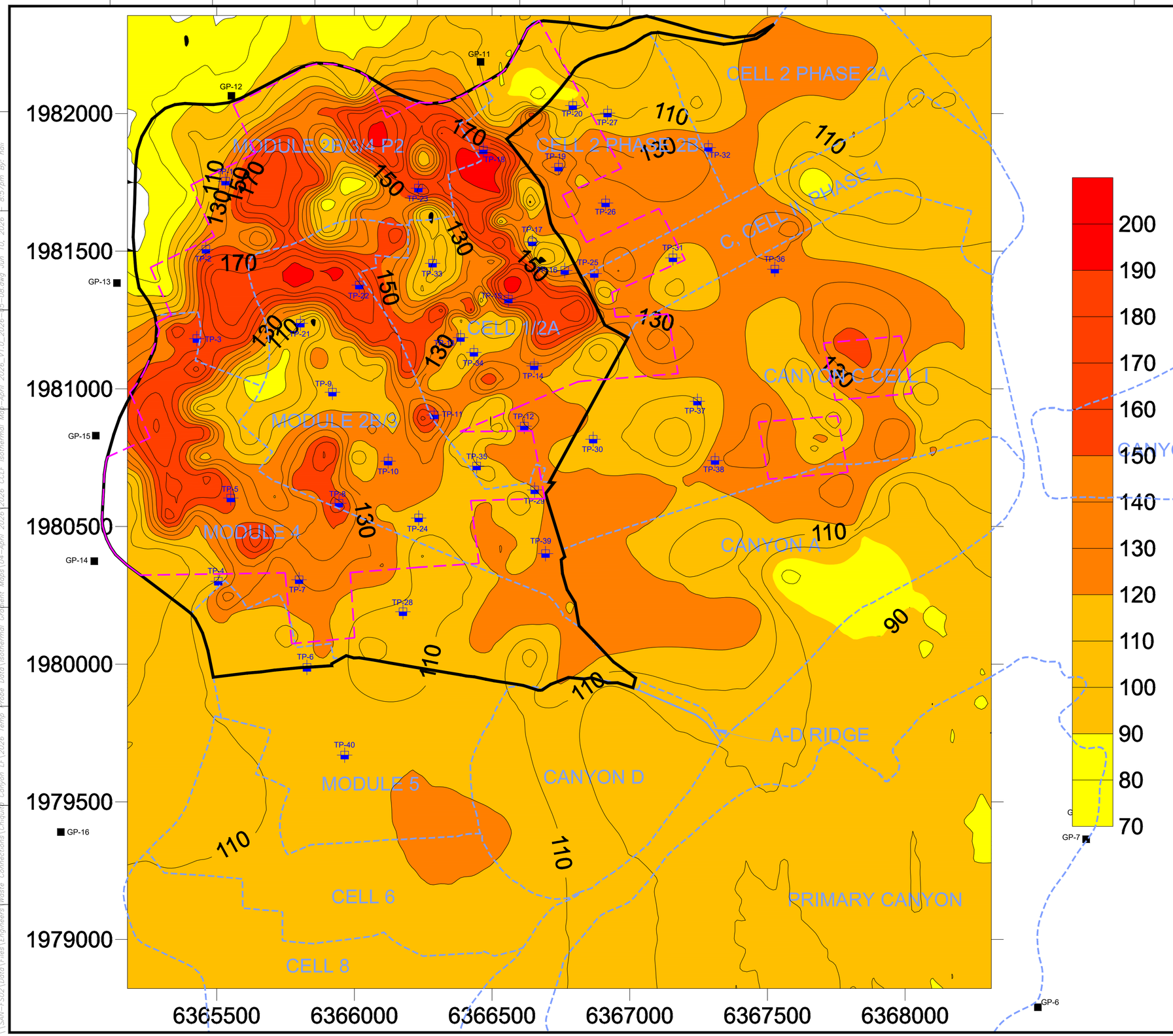
Maximum Vertical Temperature Map from Temperature Probes at Chiquita Landfill



Max Temps - 04:58:39 06-04-2026

Current | 7 Day | 30 Day

BOREHOLE	MAX TEMP (°F)	@ DEPTH (FT)
TP01	151	100
TP02	157	60
TP03	233	45
TP04	158	30
TP05	166	45
TP06	139	100
TP07	154	100
TP08	157	45
TP09	208	125
TP10	155	125
TP11	210	125
TP12	150	125
TP13	174	140
TP14	172	150
TP15	202	100
TP16	179	30
TP17	161	125
TP18	208	45
TP19	233	150
TP20	141	45
TP21	256	110
TP22	197	15
TP23	260	75
TP24	210	265
TP25	209	130
TP26	177	150
TP27	156	100
TP28	144	170
TP29	203	240
TP30	174	190
TP31	192	180
TP32	170	130
TP33	198	45
TP34	151	120
TP35	175	140
TP36	172	165
TP37	184	180
TP38	172	165
TP39	159	160
TP40	149	185



N

GRAPHIC SCALE

180 90 0 180 360 540

SCALE: 1"=180'

LEGEND

- EXISTING CELL LIMITS (APPROXIMATE)
- REACTION AREA BOUNDARY (APPROXIMATE) - BASED ON DATA REVIEW
- REACTION AREA BOUNDARY - CONDITION 9A
- GP-XX EXISTING PERIMETER MIGRATION PROBE
- TP-XX EXISTING TEMPERATURE PROBE

GENERAL DRAWING NOTES:

1. NORTH ARROW SHOWN HERE IS REFERENCE TO THE CALIFORNIA STATE PLANE ZONE V COORDINATE SYSTEM, NAD 83.

DATE

REVISION

NO.

SHEET TITLE: ISOTHERMAL GRADIENT MAP APRIL 2026

PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
3800 KILROY AIRPORT WAY, SUITE 300
LONG BEACH, CA 90806
PH. (562) 426-9544

ACAD FILE: ENGINEERS

DWN. BY: HA

CHK. BY:

APP. BY: -

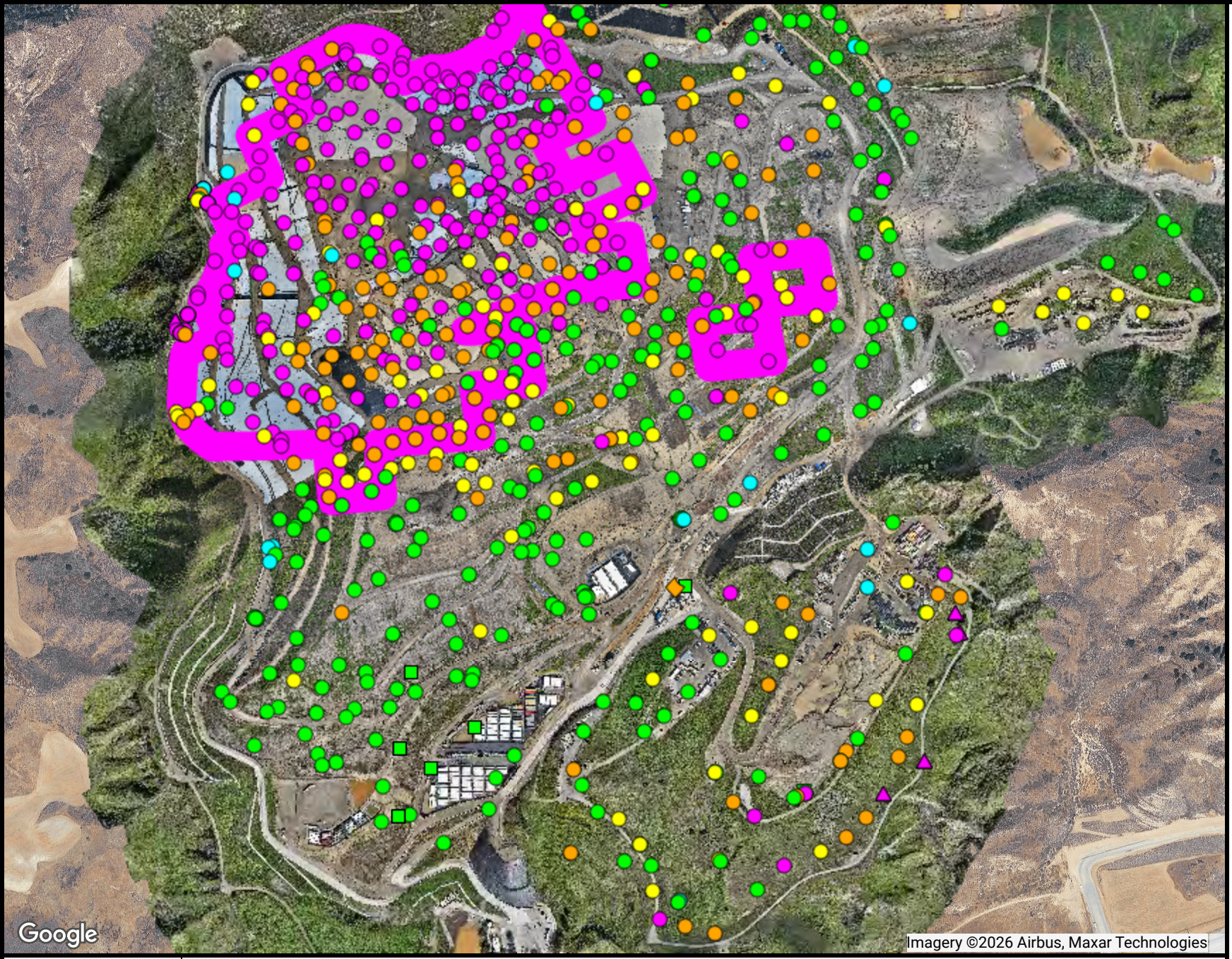
PROJ. NO. 01204123.41

DSN. BY: -

DATE: 06/10/2026

SCALE: AS SHOWN

SHEET: 1



Ranges Mapped

						# Points
	>=	0	and	<	0.5	316
	>=	0.5	and	<	0.9	166
	>=	0.9	and	<	1.1	98
	>=	1.1	and	<	1.5	259
	>=	1.5	and	<	101	19

Point Type Legend

- calibration record
- flare-engine-ghg
- monitoring probe
- sample port
- well

N

SCSeTools

Chiquita Canyon Landfill

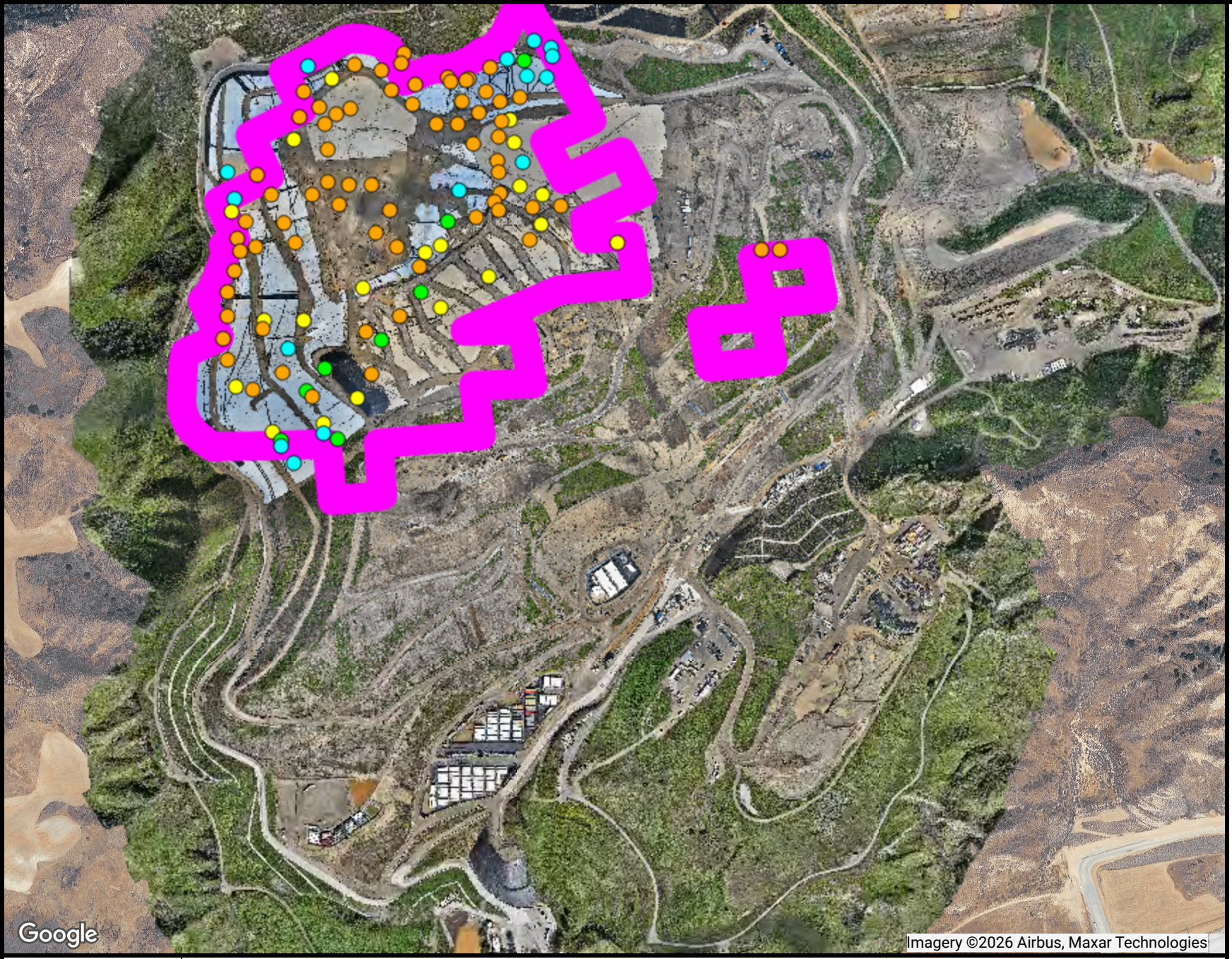
Range Map

Parameter: CH4/CO2 Ratio (high range)

Analysis Method: MostRecent

Date Range: 05/01/2026 - 05/31/2026

Map generation date : 06/10/2026



Ranges Mapped

						# Points
	>=	0	and	<	20000	18
	>=	20000	and	<	50000	8
	>=	50000	and	<	100000	20
	>=	100000	and	<	999999	69

Point Type Legend

- calibration record
- flare-engine-ghg
- monitoring probe
- sample port
- well

N

SCSeTools

Chiquita Canyon Landfill

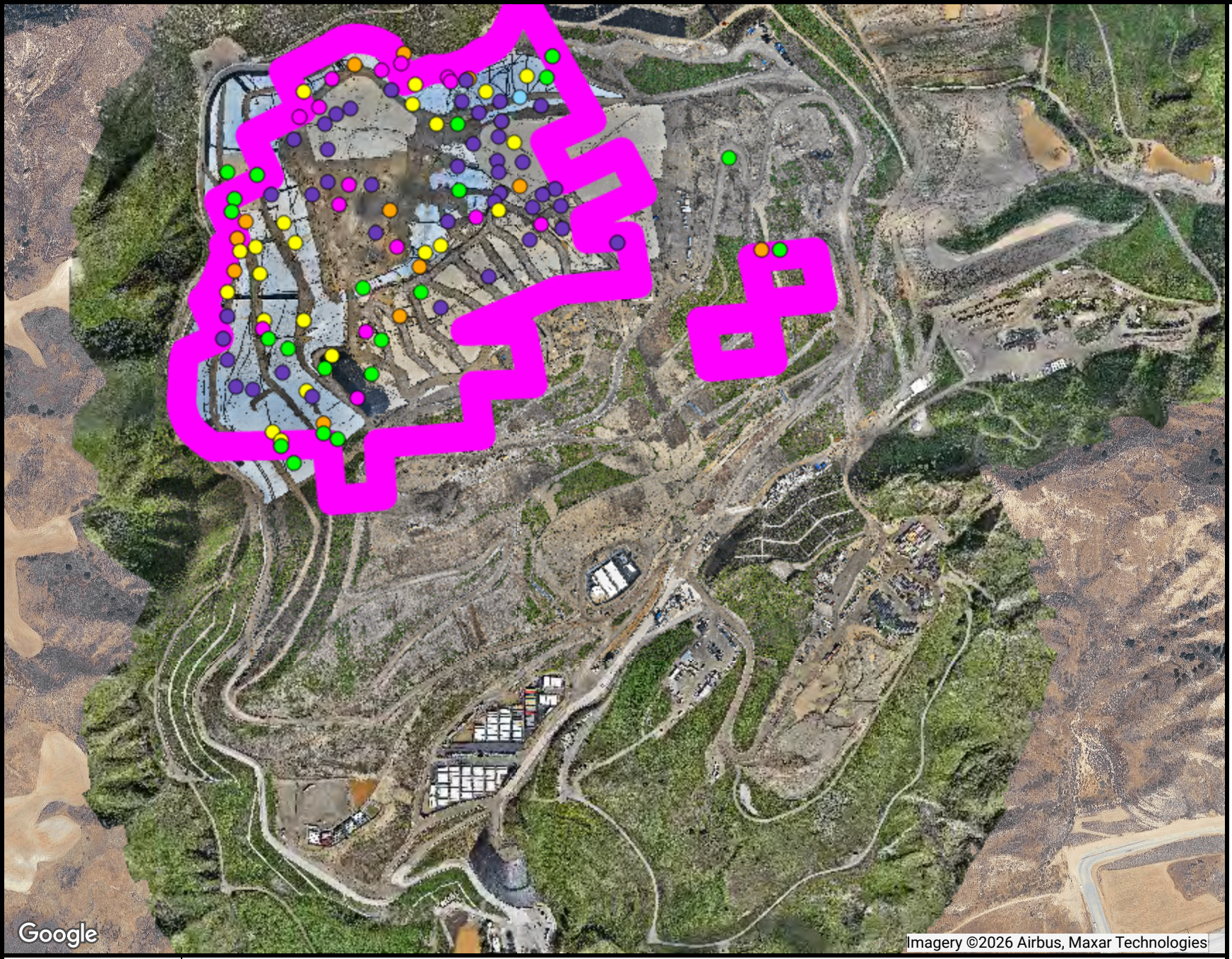
Range Map

Parameter: H2 (mid range)

Analysis Method: MostRecent

Date Range: 05/01/2026 - 05/31/2026

Map generation date : 06/10/2026



Ranges Mapped

						# Points
	>=	0	and	<	500	21
	>=	500	and	<	1000	23
	>=	1000	and	<	1500	12
	>=	1500	and	<	2000	15
	>=	2000	and	<	5000	42
	>=	5000	and	<	100000	1

Point Type Legend

- calibration record
- flare-engine-ghg
- monitoring probe
- sample port
- well

N

SCSeTools

Chiquita Canyon Landfill

Range Map

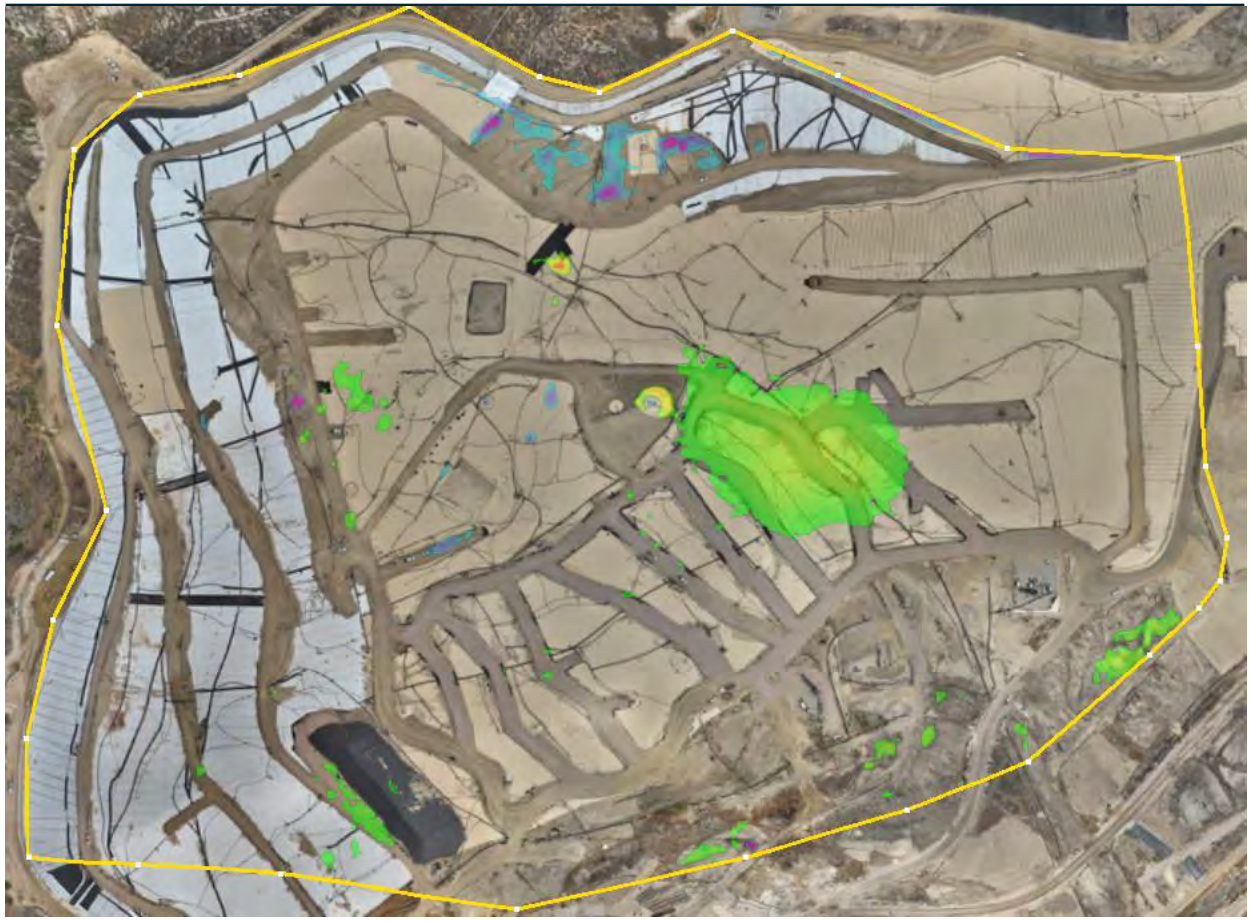
Parameter: CO LAB (mid range)

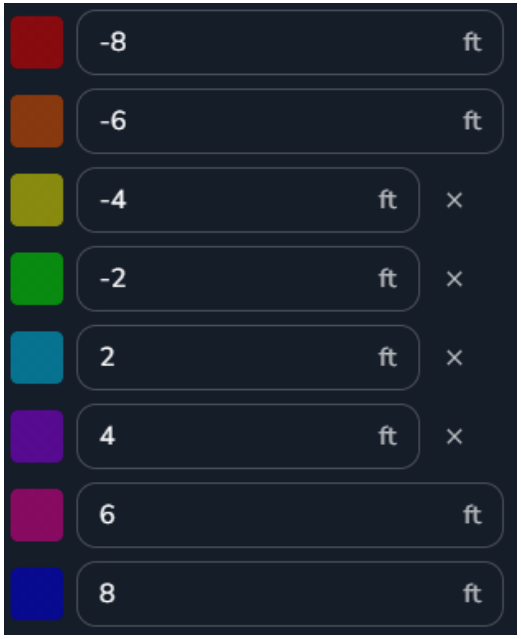
Analysis Method: MostRecent

Date Range: 05/01/2026 - 05/31/2026

Map generation date : 06/10/2026

Chiquita Canyon Landfill -Isopach





May 27, 2026 Survey Image. April 1, 2026 vs May 27, 2026