

Bridgeton Landfill, LLC

Weekly Data Submittals

**Required by Section 52.F of Agreed Order, Case No. 13SL-CC01088
Effective May 13, 2013**

Contents:

- Attachment A – Leachate Levels in Leachate Collection Sumps**
- Attachment B – Temperature Monitoring Probe Analytical Charts**
- Attachment C – Gas Interceptor Wellhead Temperature Graphs**
- Attachment D – Gas Well GEW-54 Wellhead Temperature**

Provided Separately:

- Leachate Level in Leachate Collection Sump Raw Data Excel Spreadsheet**
- Temperature Monitoring Probe Raw Data Excel Spreadsheet**
- Gas Interceptor Well Reading Raw Data Excel Spreadsheet**

August 27, 2013

Commentary on Data

Attachment A – Leachate Levels in Leachate Collection Sumps

Bridgeton Landfill has installed replacement sump LCS-3C but is unable to install a pump due to excessive pressures and surging conditions. A replacement for LCS-4B has been drilled but attempts to place well casing and pump in it have been temporarily abandoned until some excess pressure in the LCS is relieved. LCS-1 appears to be compromised (bent or collapsed) partially down so it is not possible to insert a full-depth pump; however, we will insert a Blackhawk pump as deep as possible to resume leachate removal.

The other leachate collection sumps appear to be operating properly with measured leachate levels below the required pumping levels.

Attachment B – Temperature Monitoring Probe Analytical Charts

The following TMPs indicated virtually identical or lower temperature profiles than previous week(s): TMP-1, -2, -3, -4, -5, -6, -7, -9, -10, -11, -12, -13, and -14.

None of the TMPs suggest increases from the previous couple of weeks. However, it is possible that this condition does not reflect a consistent cooling, as reading-to-reading variables such as radio frequency interference (RFI) or other systemic variables can affect the readings slightly.

In the previous two weeks, TMP-13 indicated moderate to significant increase at the 129' and 149' depth intervals. However, the resistance check on those intervals returned anomalously low resistance values suggesting that the wires were compromised. Further forensic tests performed last week appear to verify that the TMP wires at those depth intervals are compromised, and as a result, will no longer be monitored. A report summarizing the forensics of TMP-13 will be submitted with the next weekly report. Further support to the likelihood of wire damage in TMP-13 is offered by the temperature monitoring of GIW-10 which is located about 27' south (closer to the SSE) of TMP-13 and which indicates a very stable temperature range over the past two months. Since TMP-13 is on a proposed trigger line, we are proposing to replace it and are working to order the parts and drilling contractor.

Attachment C – Gas Interceptor Wellhead Temperature Graphs

The following GIWs indicated virtually identical or slightly trending lower wellhead temperatures as recent previous week(s): GIW-1, -2, -5, -6, -7, -10, -12, and -13. The following GIWs indicated slight to moderate observable increases in wellhead temperatures as recent previous week(s): GIW-3, -4, -8, -9, and -11.

Overall, GIW wellhead temperatures have been steady or intermittently increasing. The function of these wells is to remove heat from in front of the reaction and they appear to be consistently performing that function.

Attachment D - Gas Well GEW-54 Wellhead Temperature

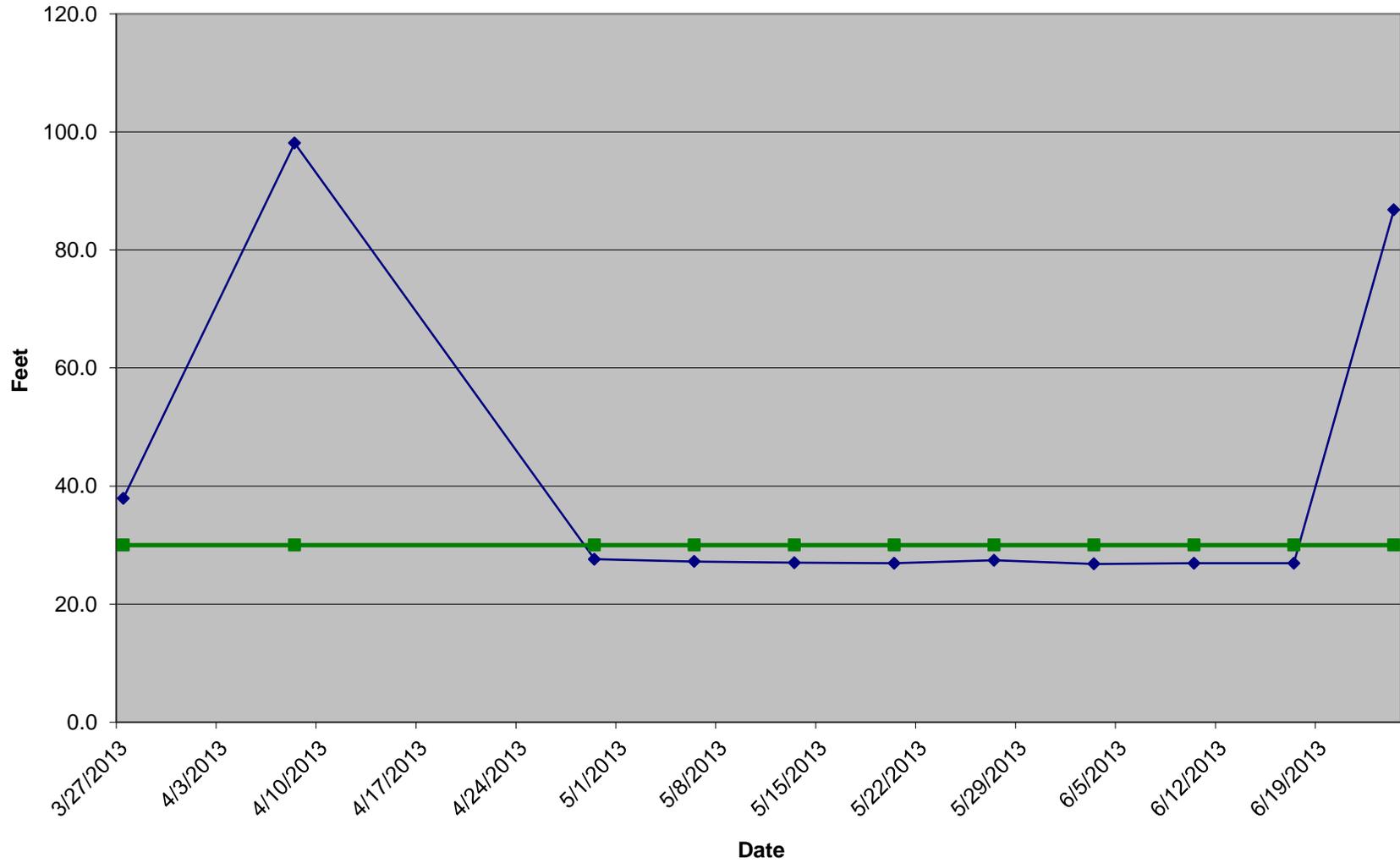
This attachment was first added to the weekly data report on July 23, 2013 to track wellhead temperature in GEW-54 which is located in the North Quarry, has historically exhibited somewhat elevated temperatures, and which, on June 18, 2013, exhibited a wellhead temperature of 155°F.

As seen in Attachment D, the most recent wellhead temperature is 143° F. The past four weekly monitoring events indicate a narrow 143-152° F temperature range.

ATTACHMENT A

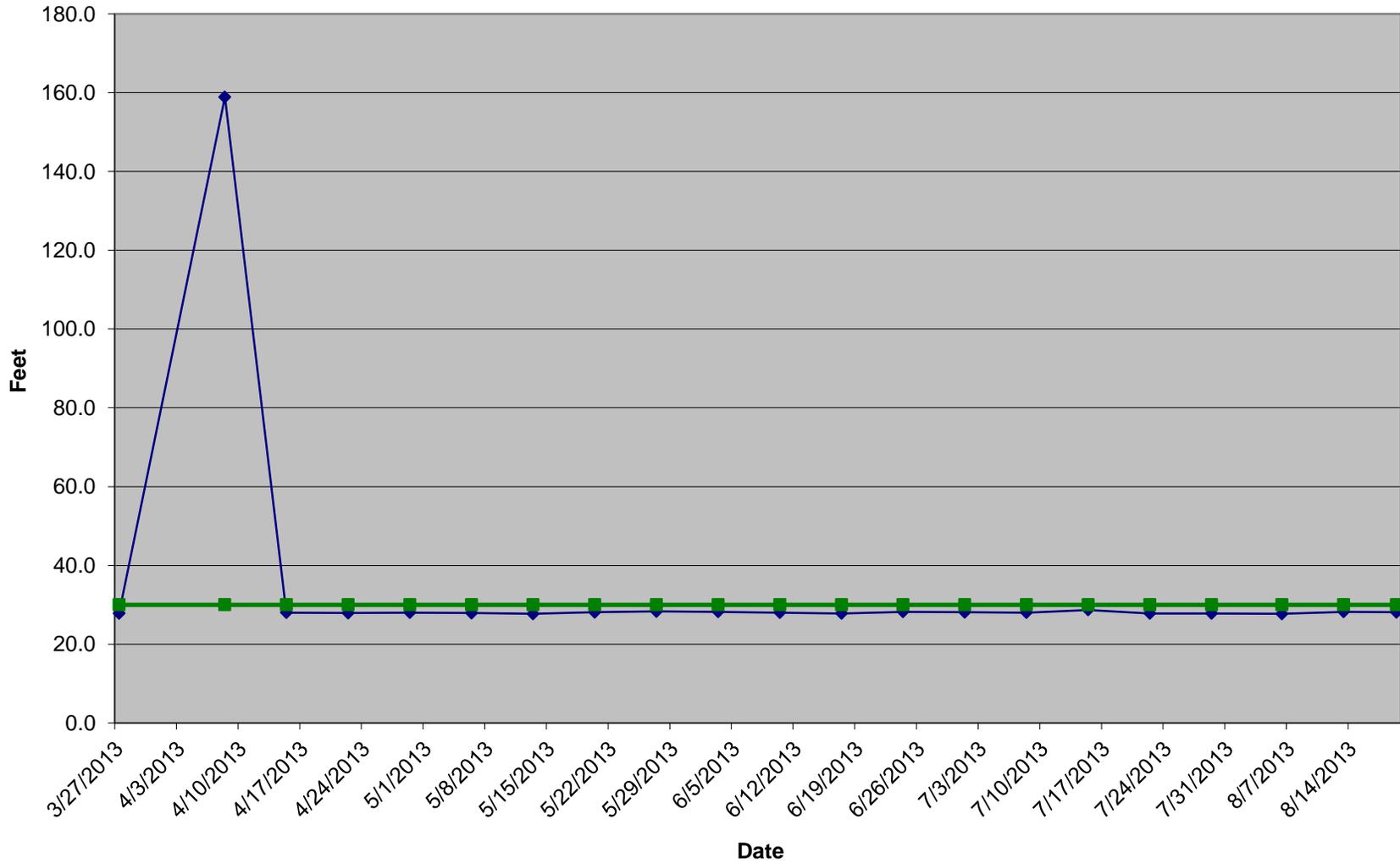
LEACHATE LEVELS IN LEACHATE COLLECTION SUMPS

LCS-1D Liquid Level Above Quarry Floor



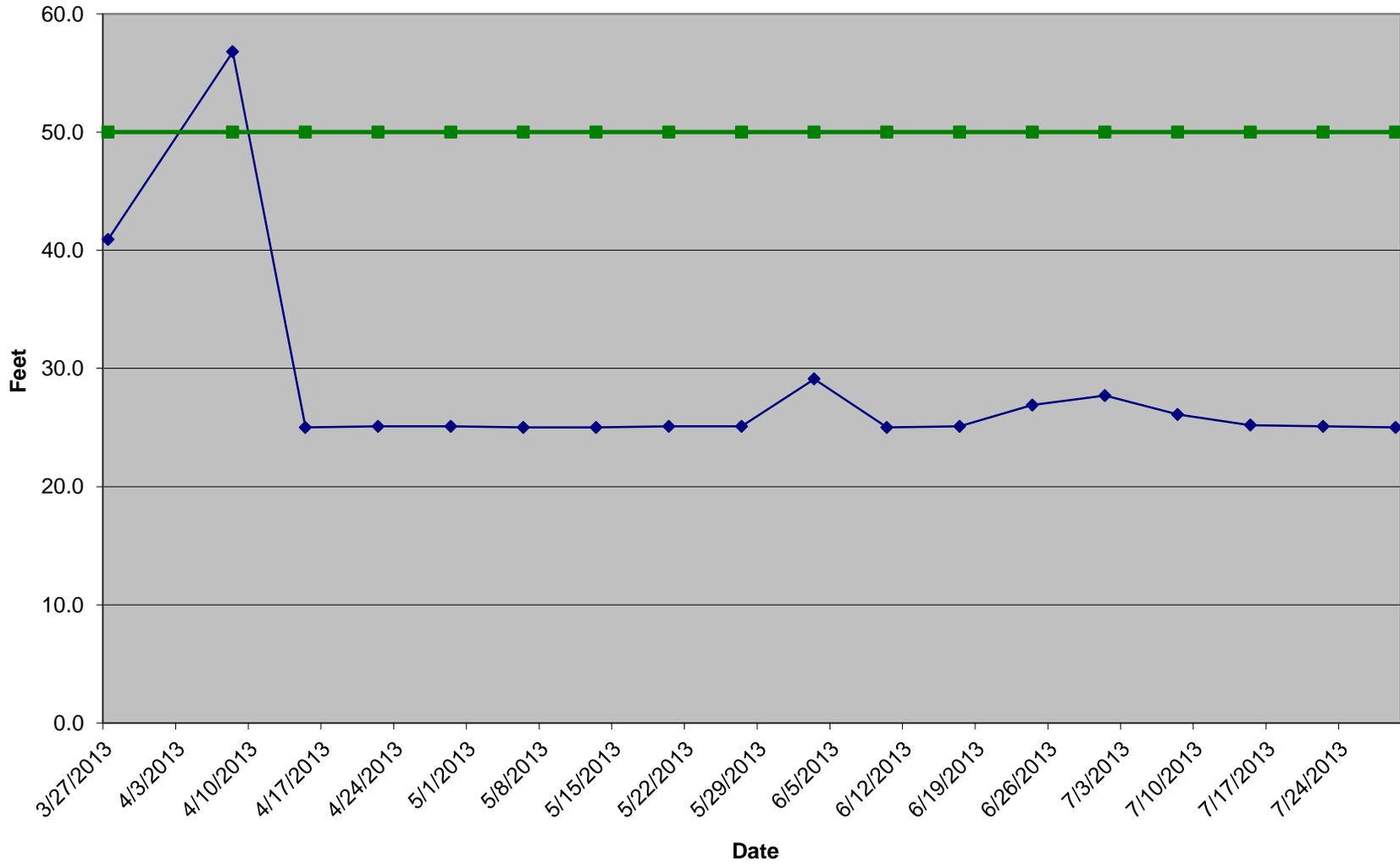
◆ Height of Liquid (Ft.) ■ Compliance Level (Ft. Above Quarry Floor)

LCS-2D Liquid Level Above Quarry Floor



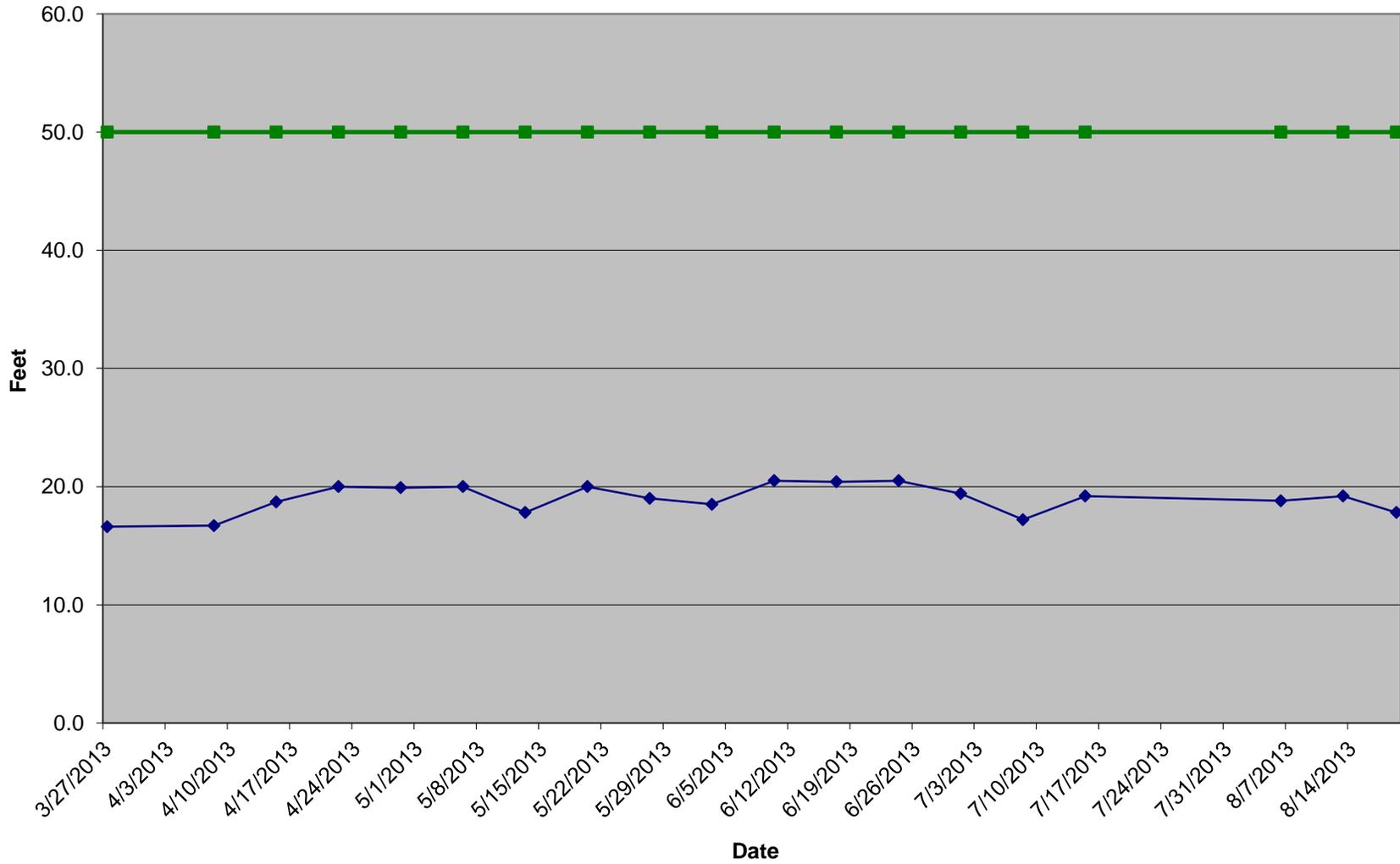
—◆— Height of Liquid (Ft.) —■— Compliance Level (Ft. Above Quarry Floor)

LCS-5A Liquid Level Above Quarry Floor



◆ Height of Liquid (Ft.) ■ Compliance Level (Ft. Above Quarry Floor)

LCS-6B Liquid Level Above Quarry Floor

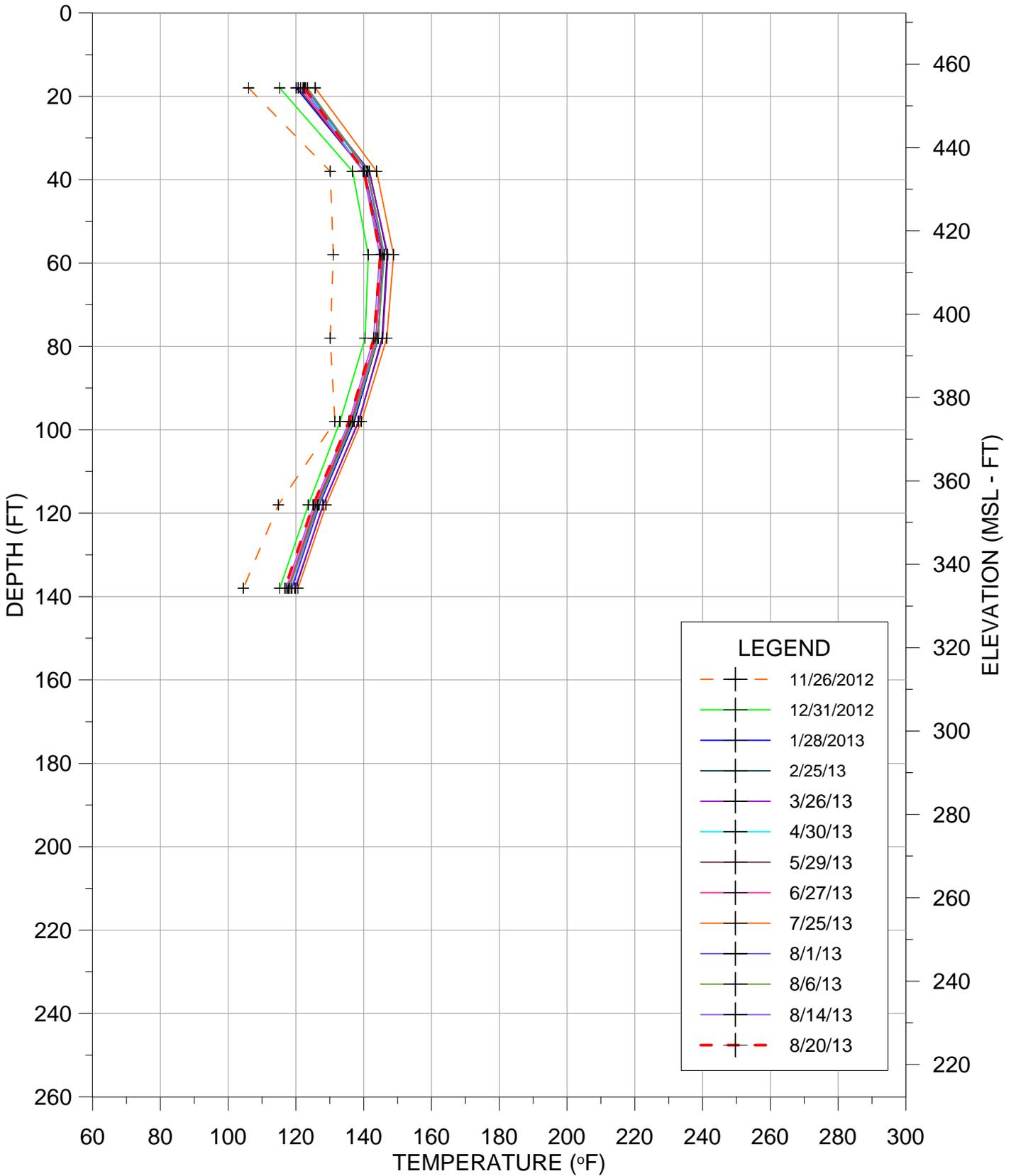


◆ Height of Liquid (Ft.) ■ Compliance Level (Ft. Above Quarry Floor)

ATTACHMENT B

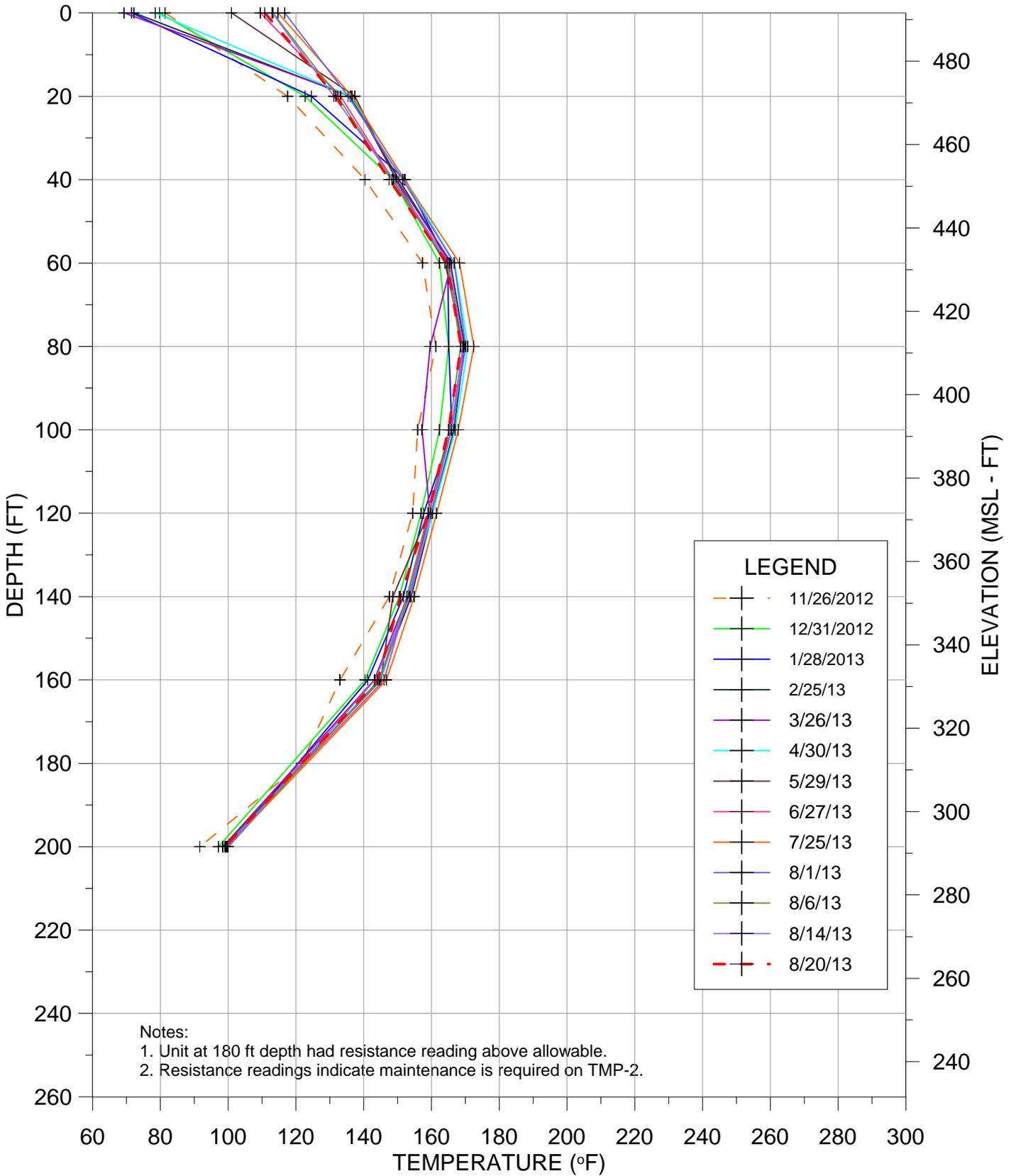
TEMPERATURE MONITORING PROBE ANALYTICAL CHARTS

TMP-1



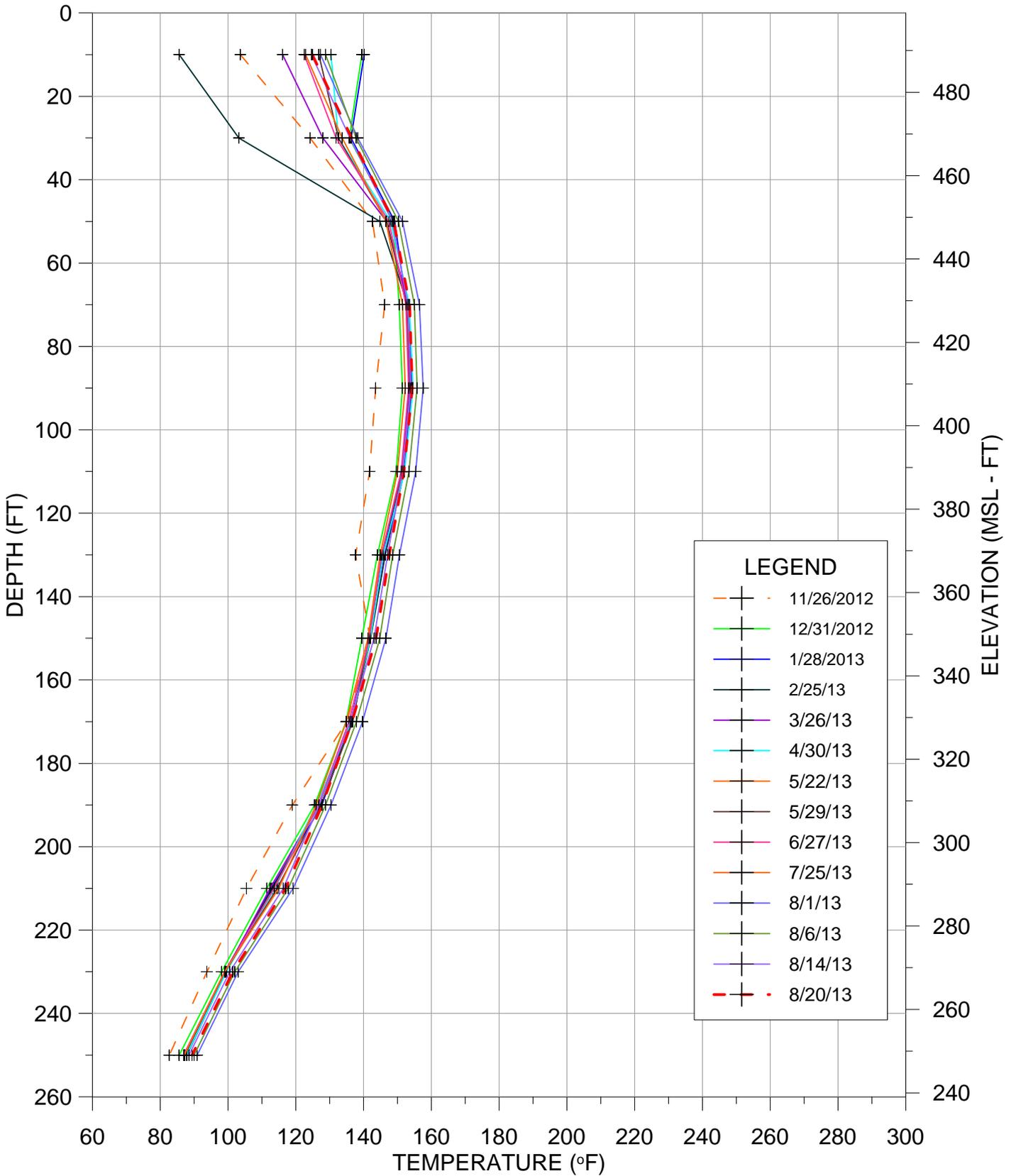
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-2



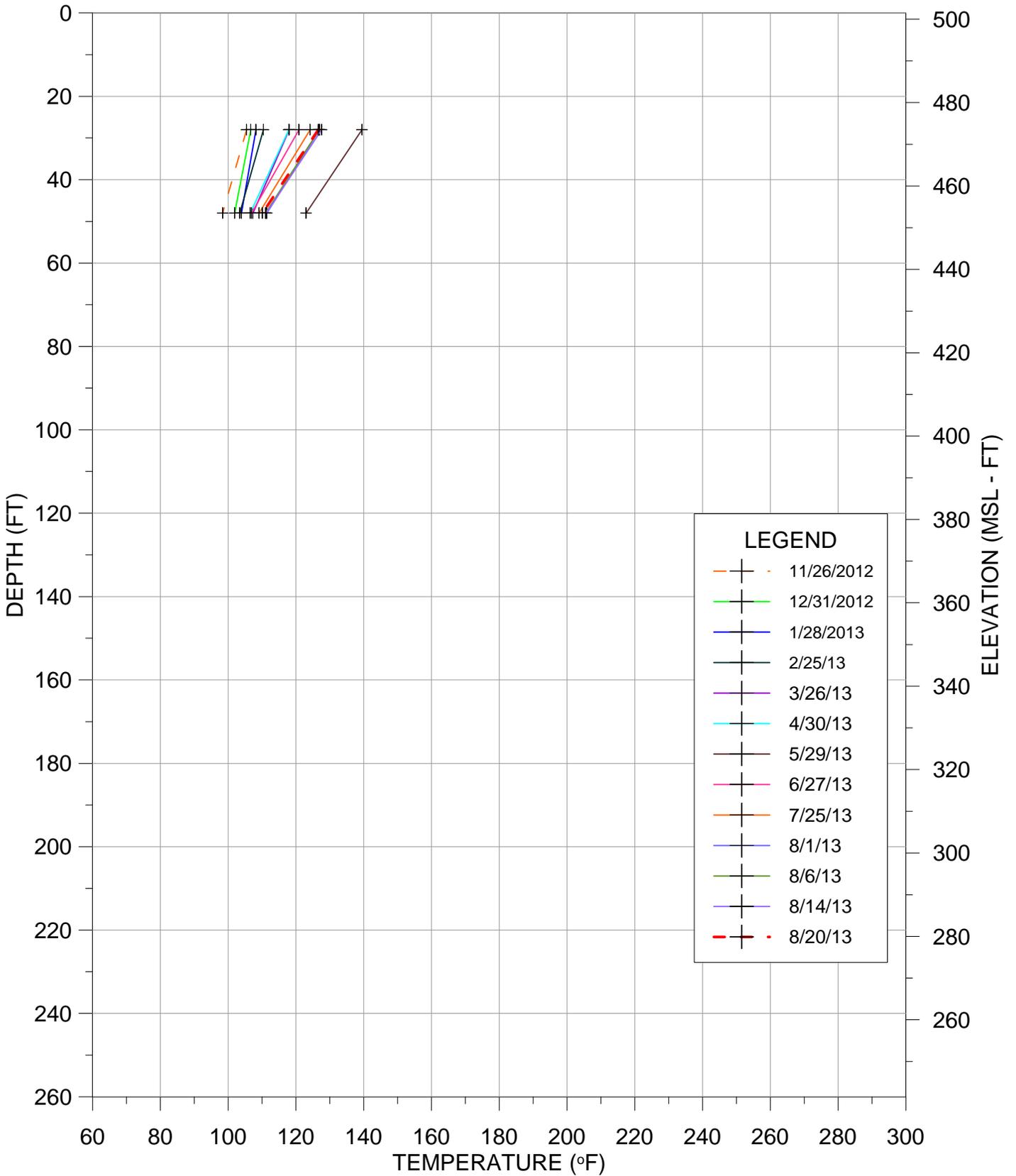
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-3



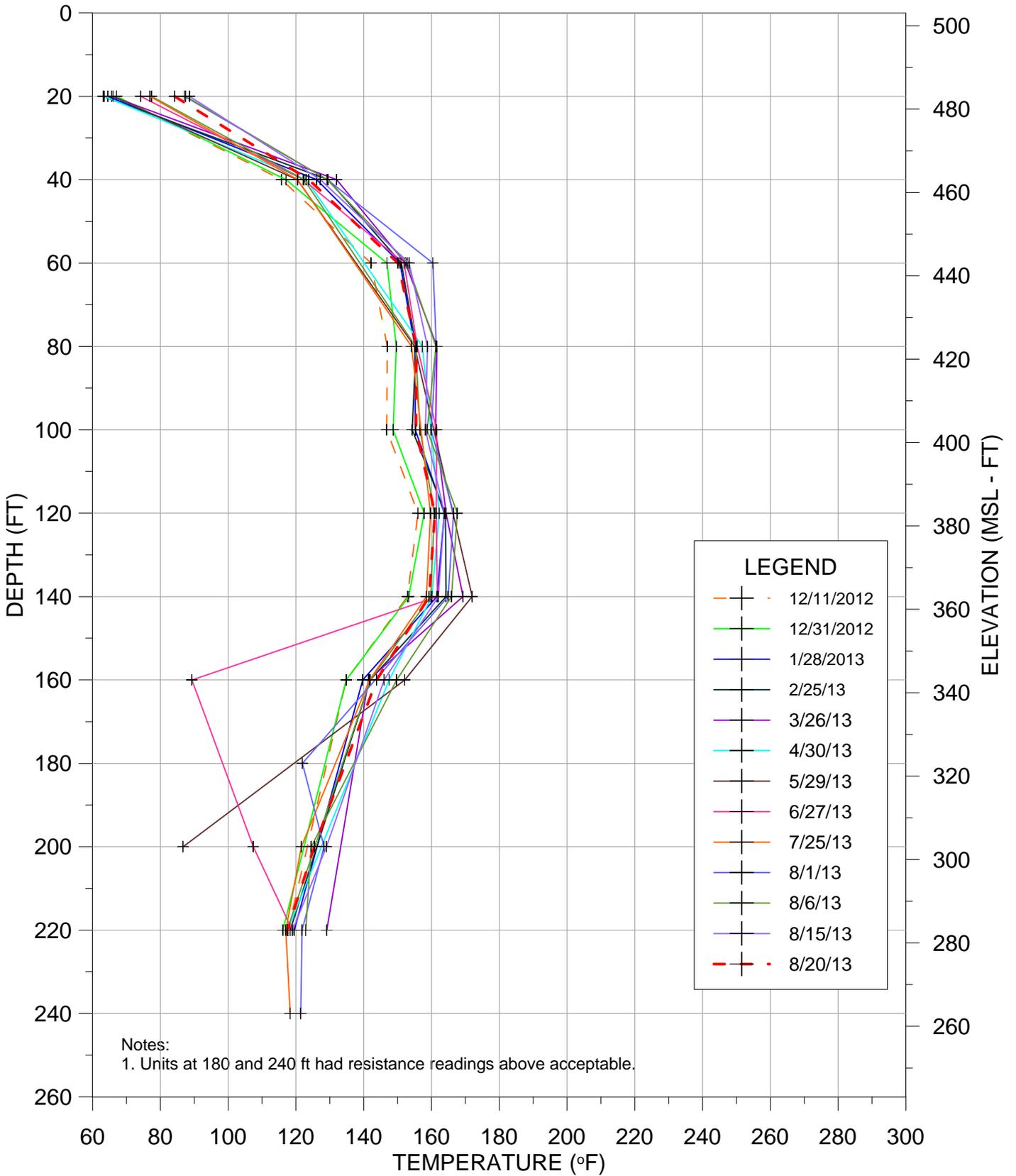
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-4



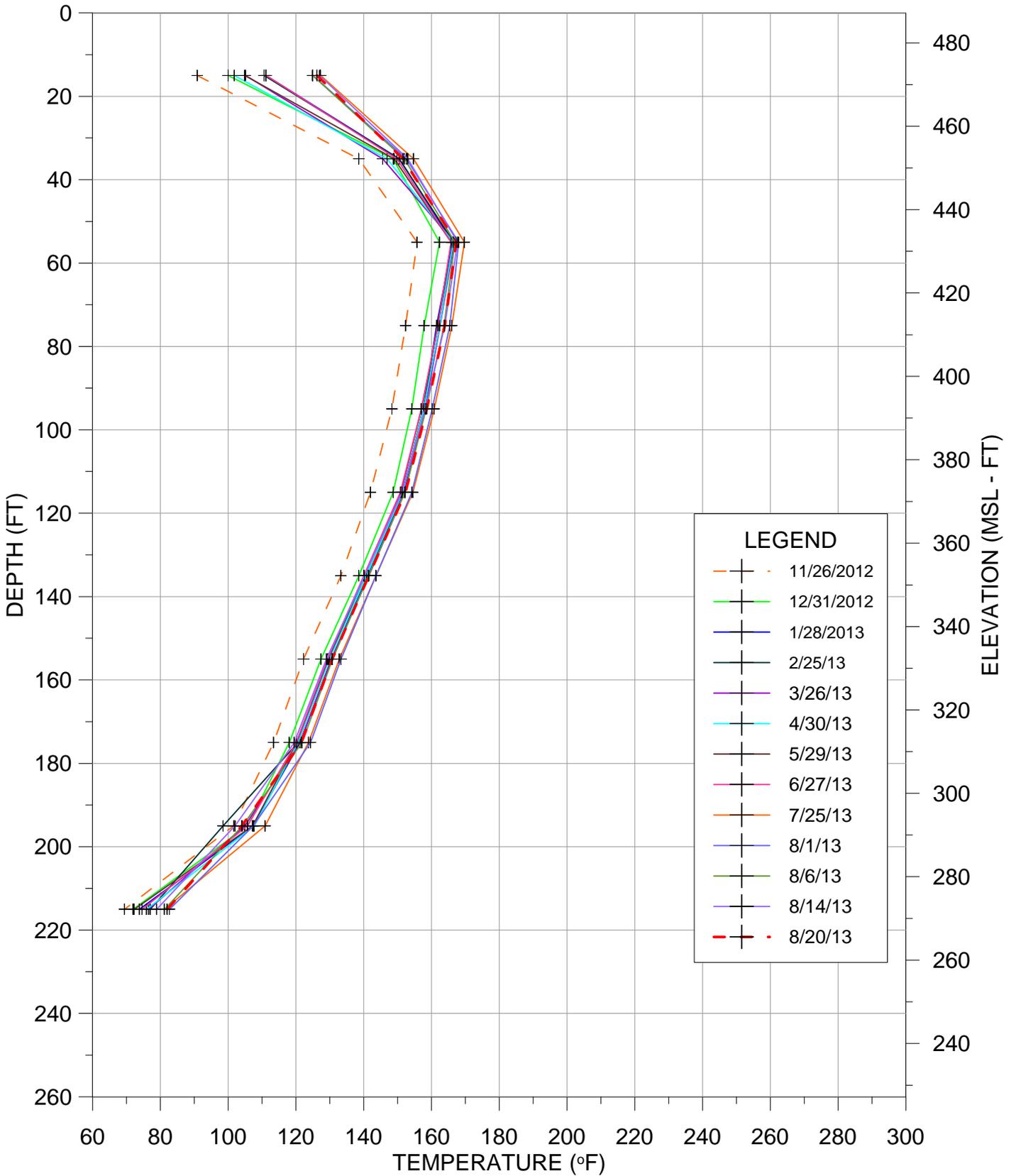
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-5



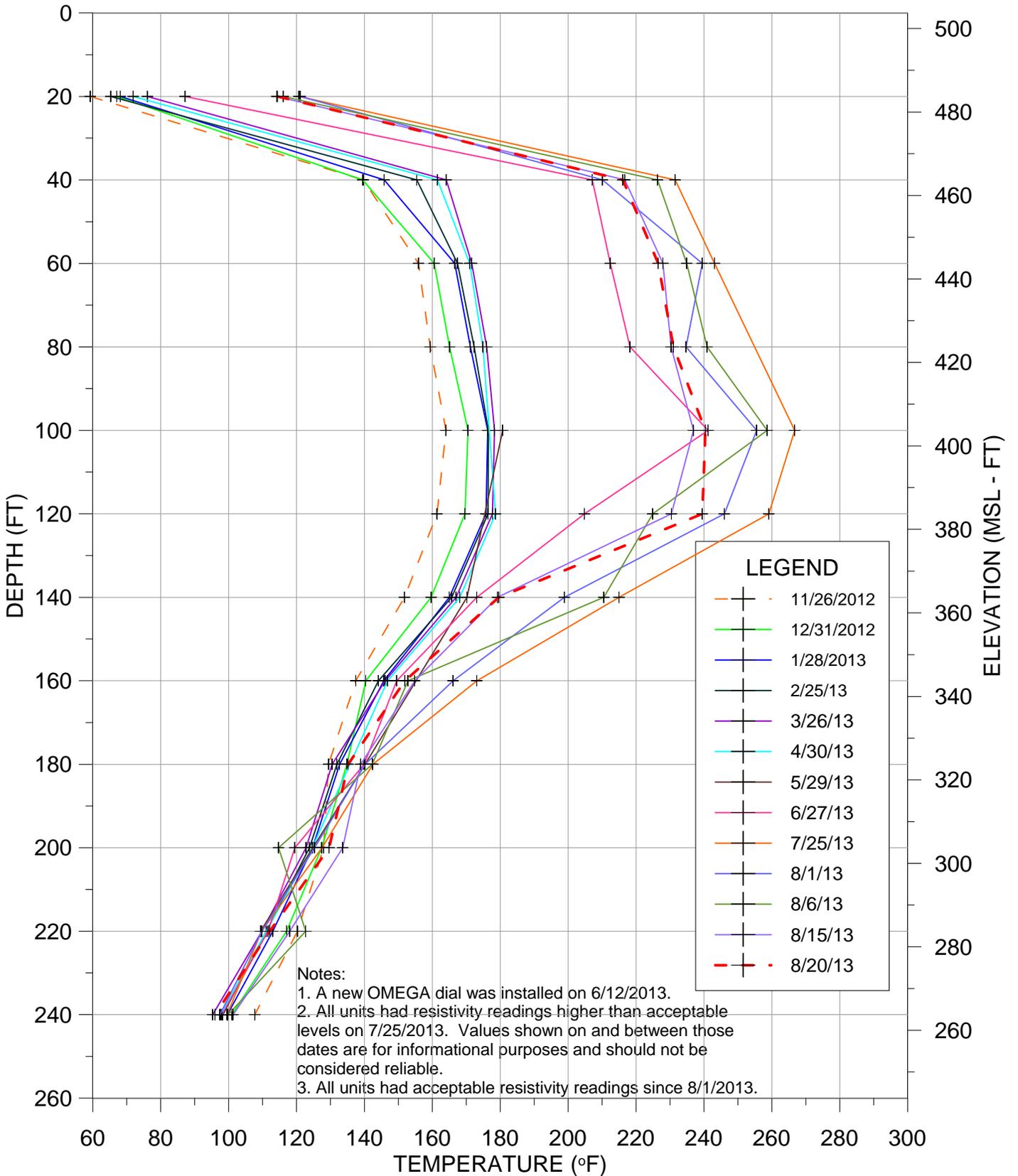
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-6



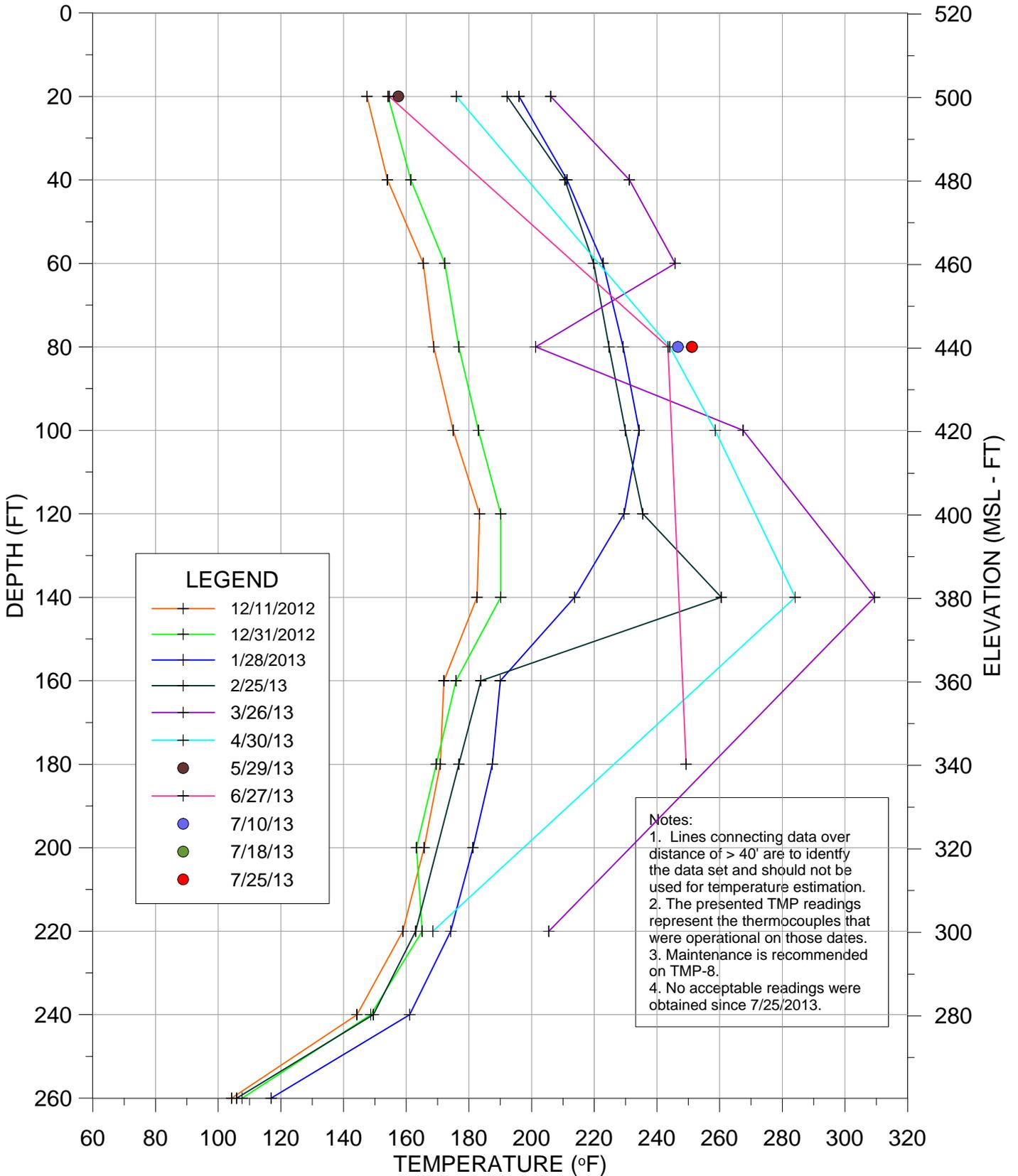
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-7R



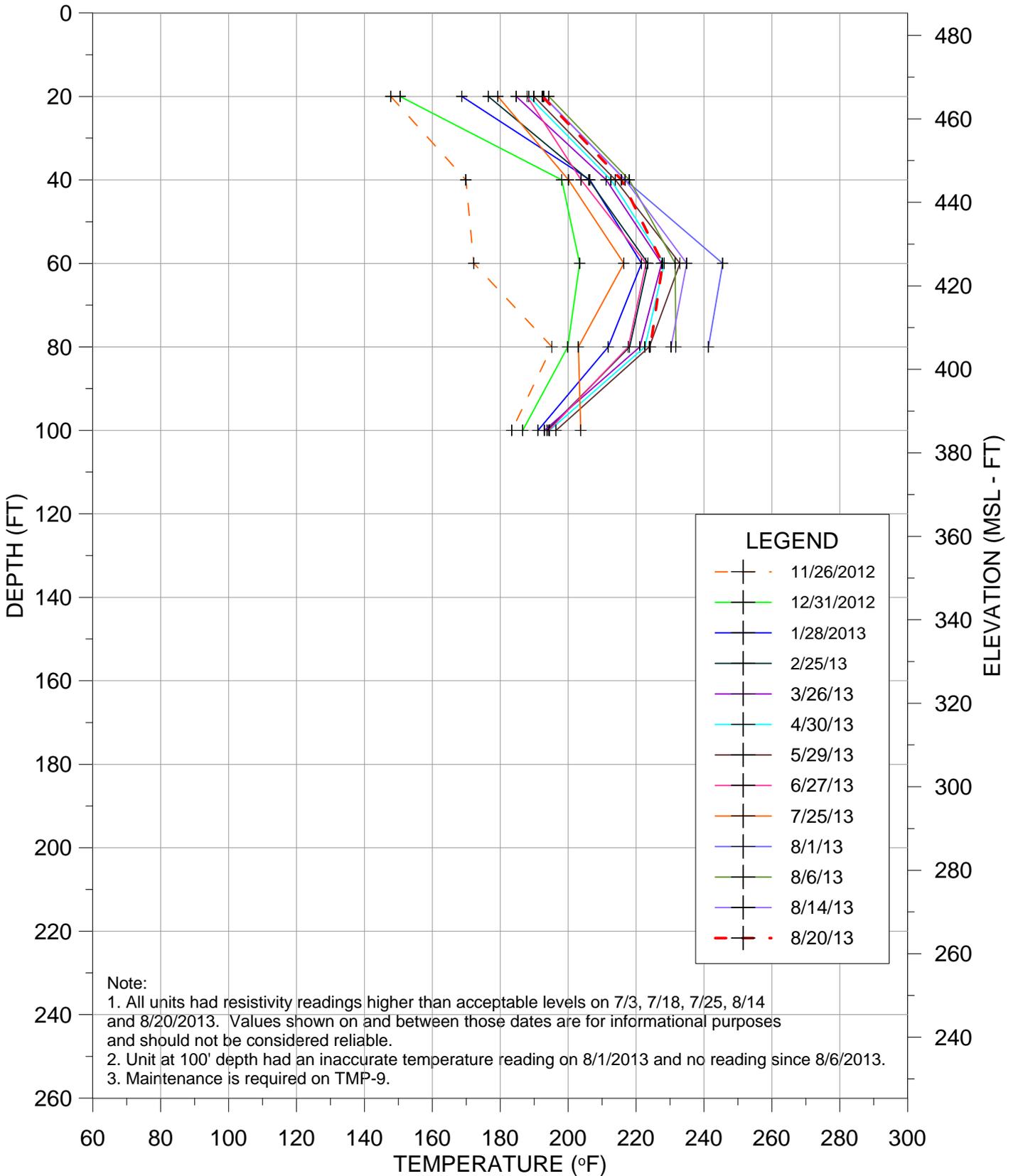
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-8



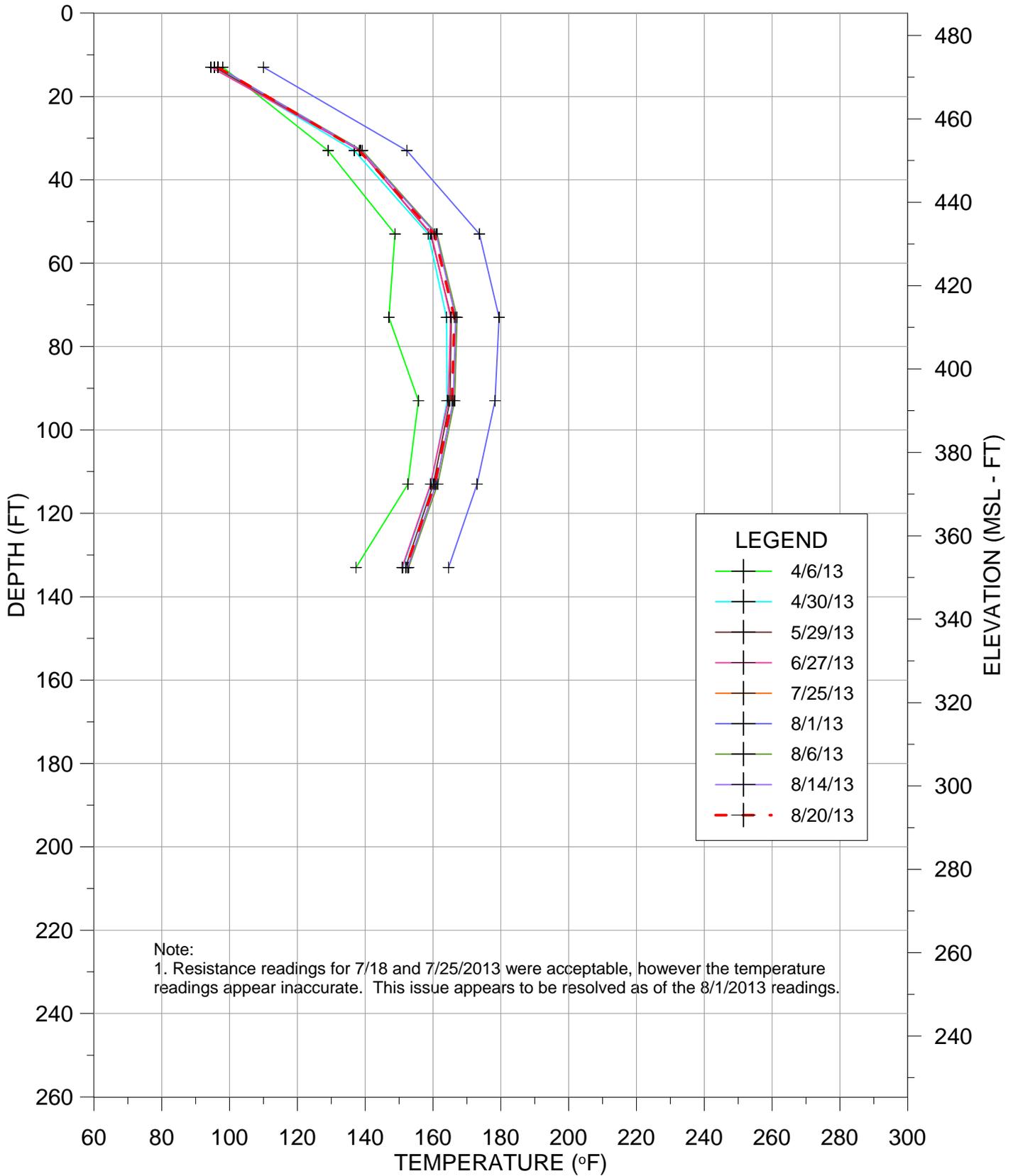
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-9



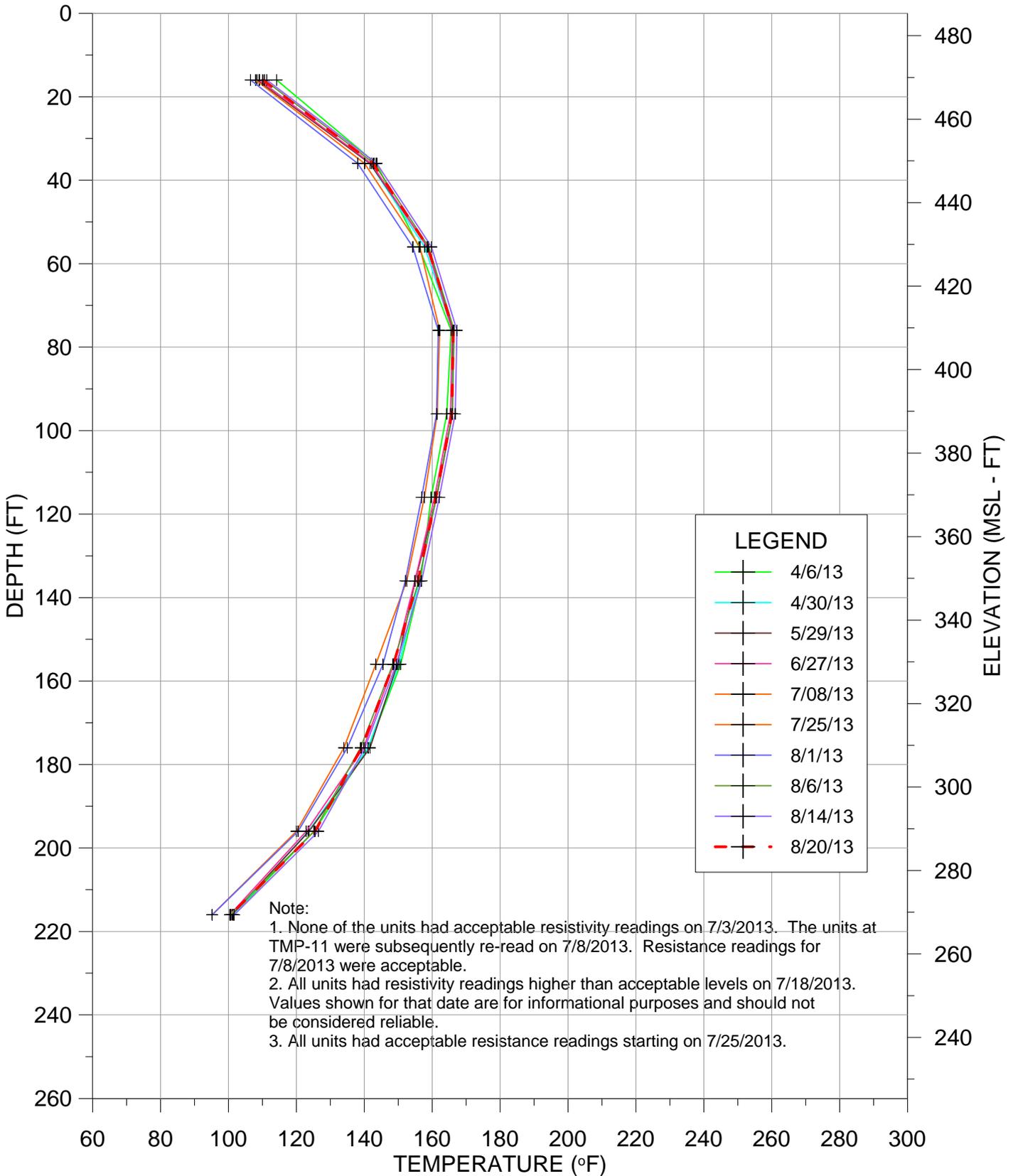
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-10



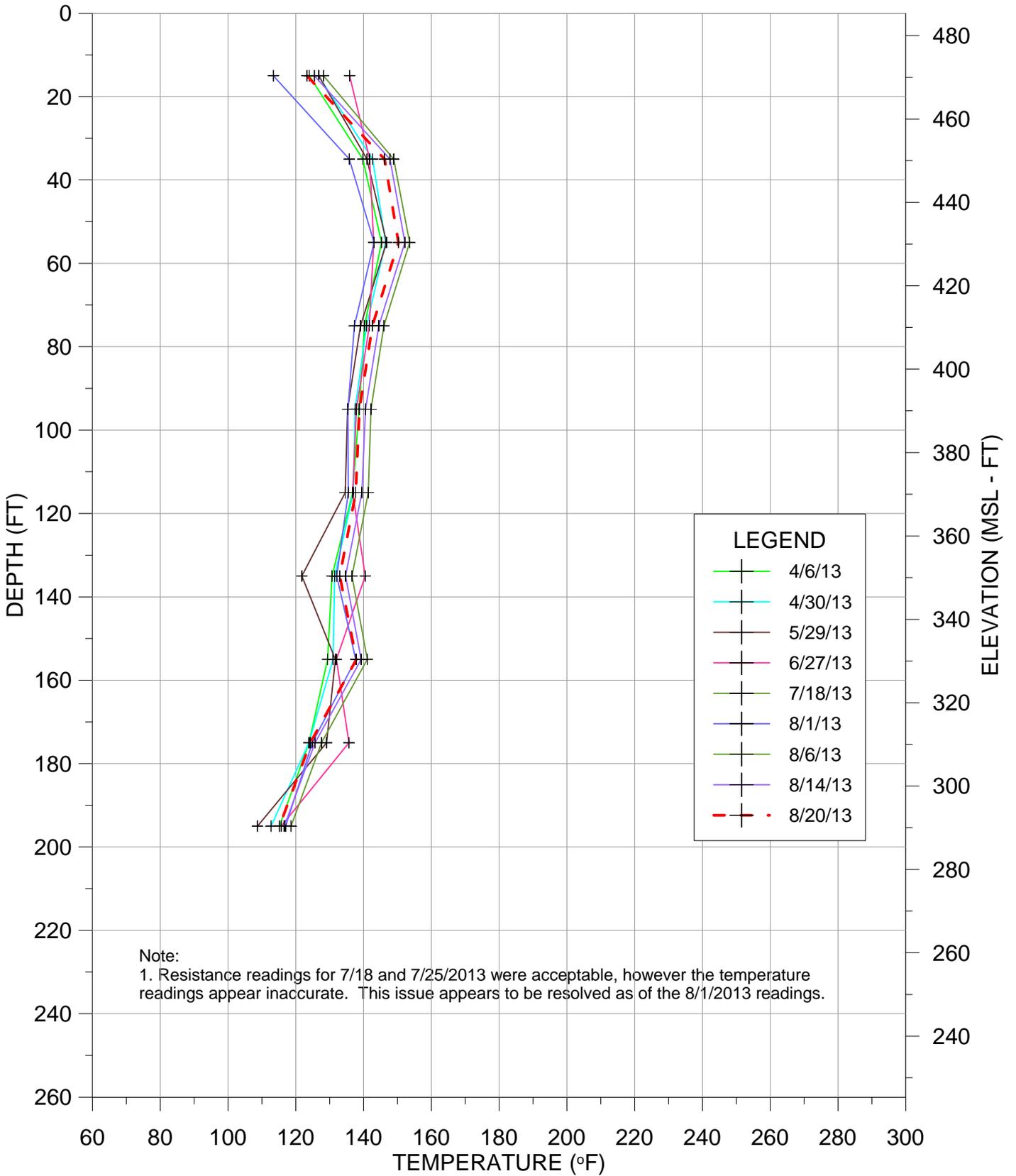
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-11



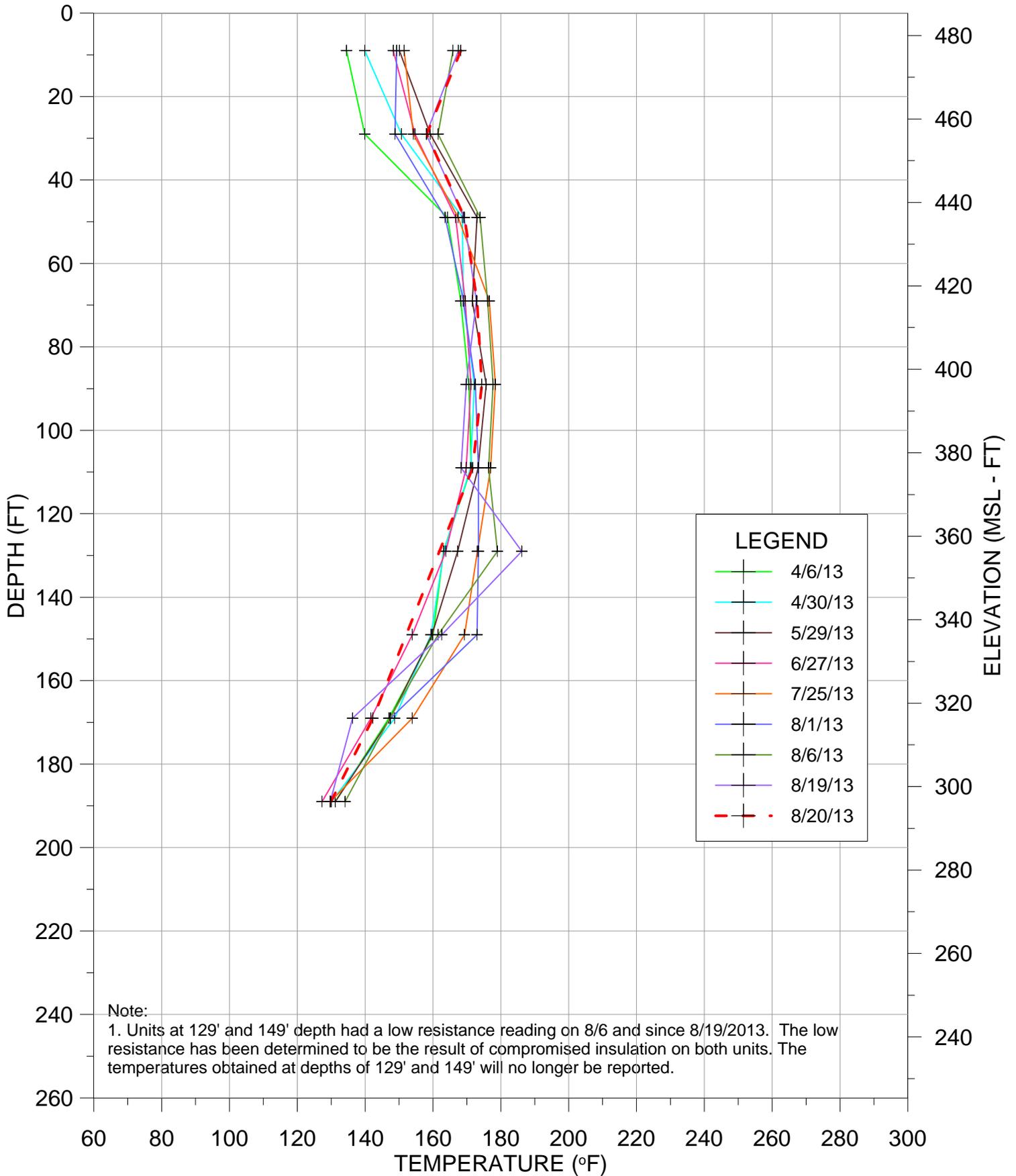
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-12



TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

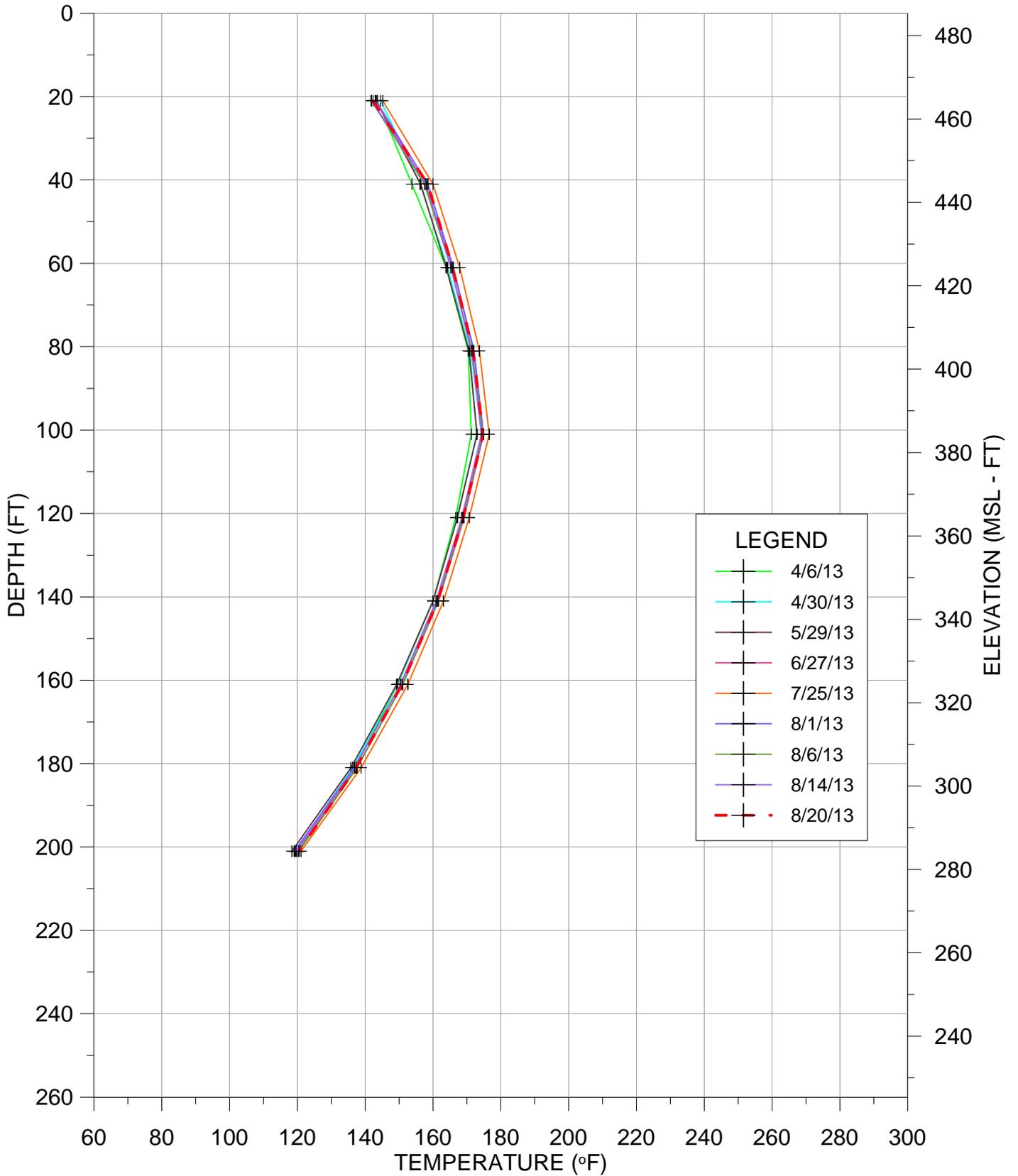
TMP-13



Note:
 1. Units at 129' and 149' depth had a low resistance reading on 8/6 and since 8/19/2013. The low resistance has been determined to be the result of compromised insulation on both units. The temperatures obtained at depths of 129' and 149' will no longer be reported.

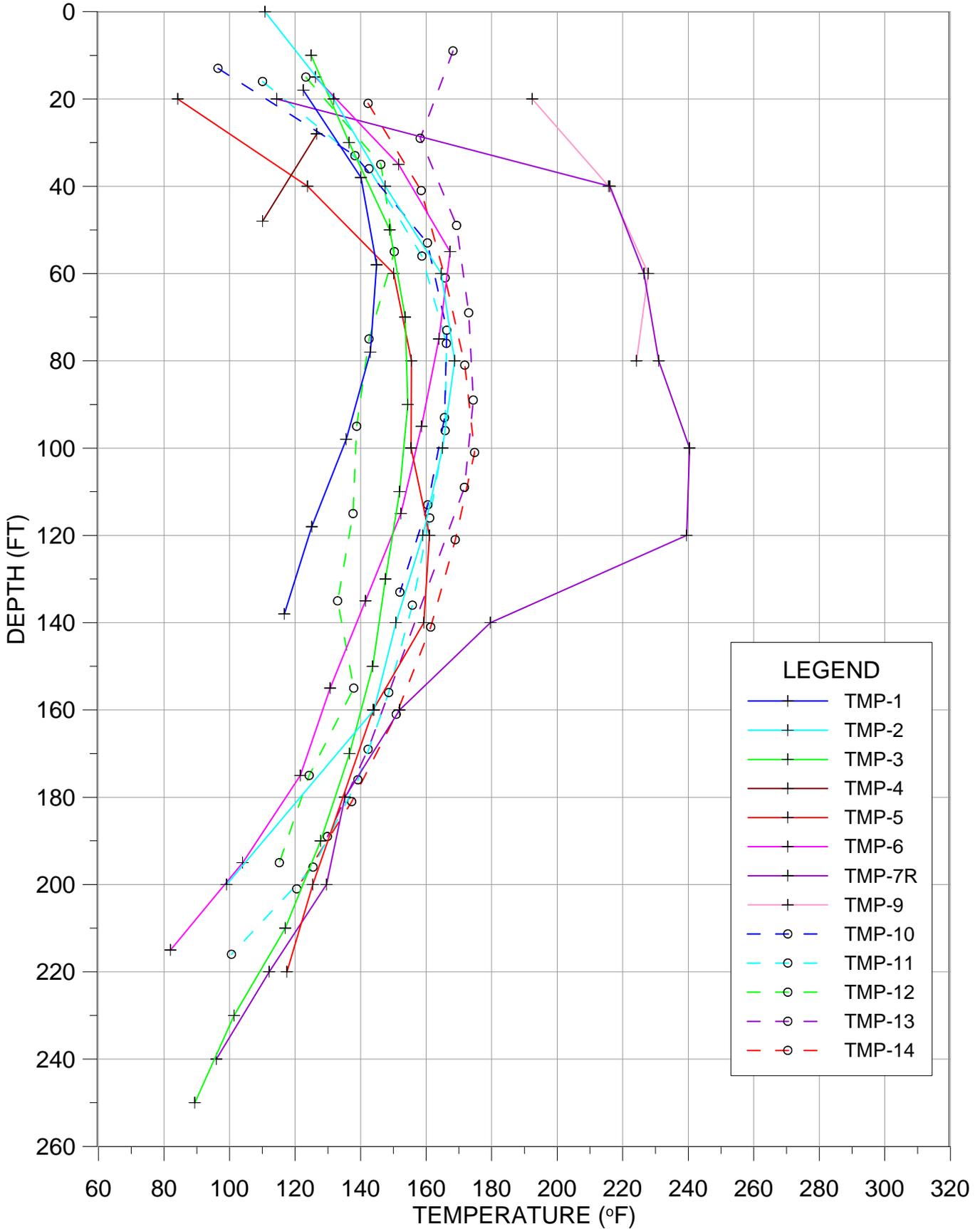
TEMPERATURE VS DEPTH
 BRIDGETON LANDFILL

TMP-14



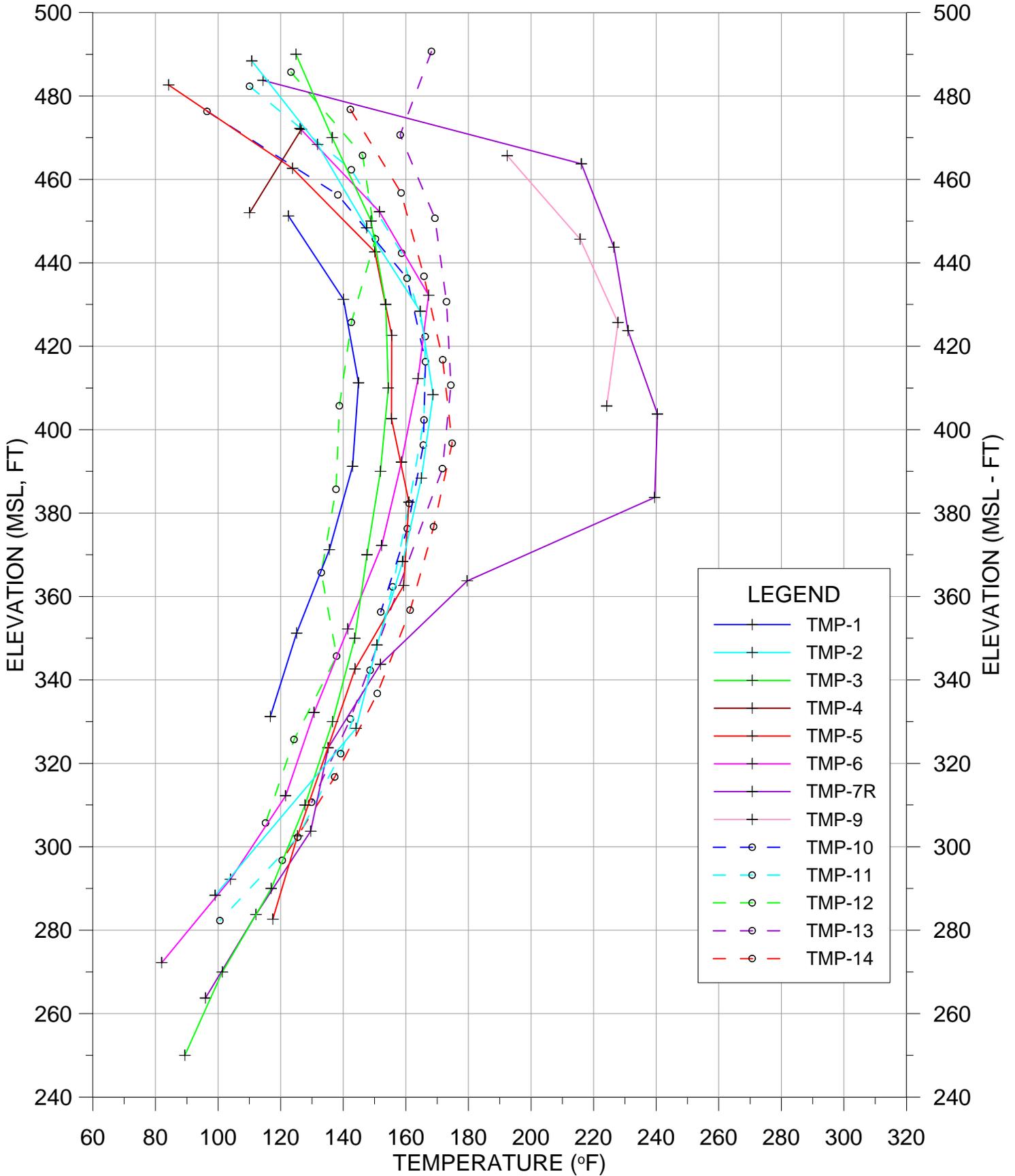
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

8/20/2013 -DEPTH



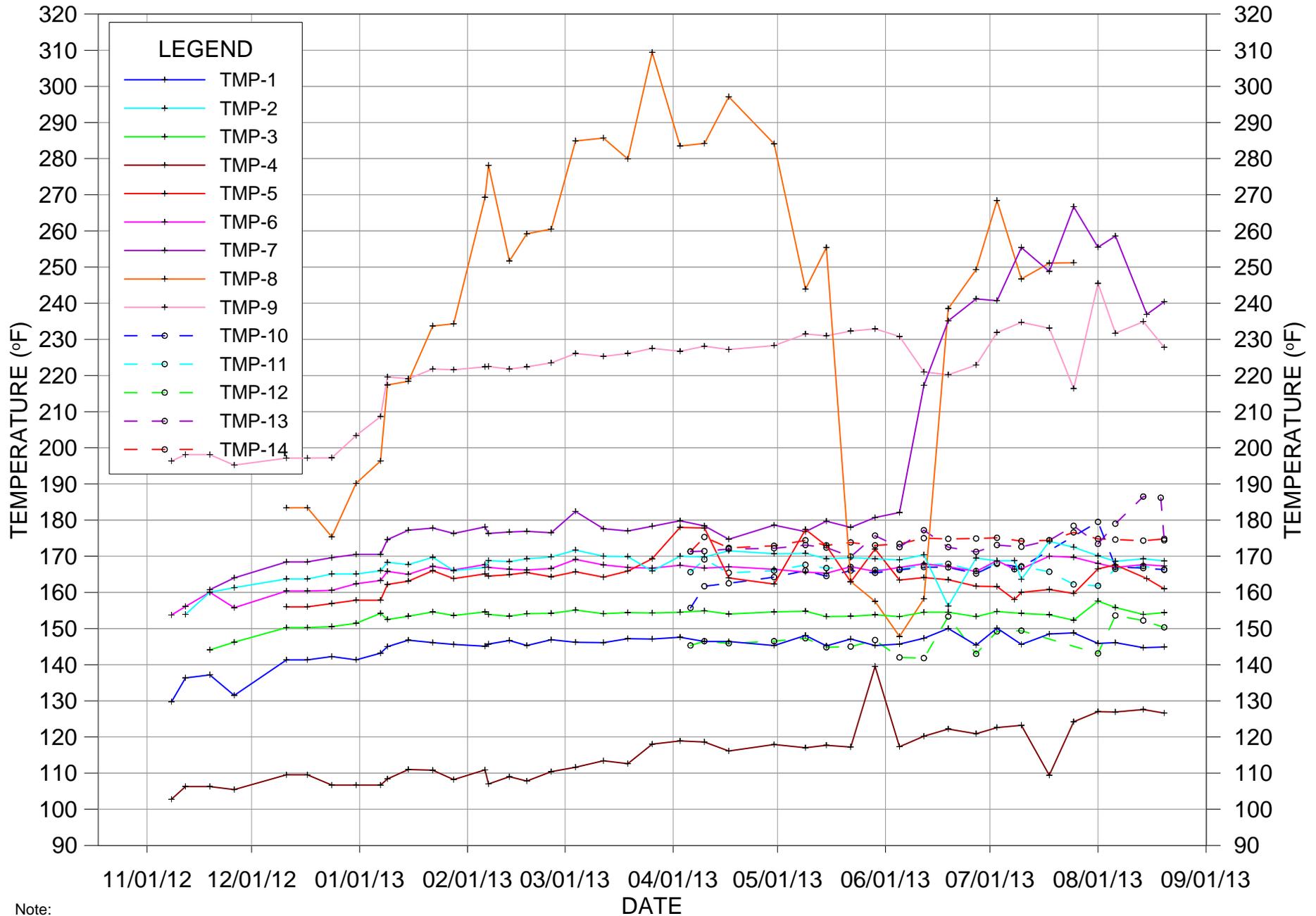
TEMPERATURE VS ELEVATION
BRIDGETON LANDFILL

8/20/2013 - ELEVATION



TEMPERATURE VS ELEVATION
BRIDGETON LANDFILL

MAXIMUM TEMPERATURES



Note:

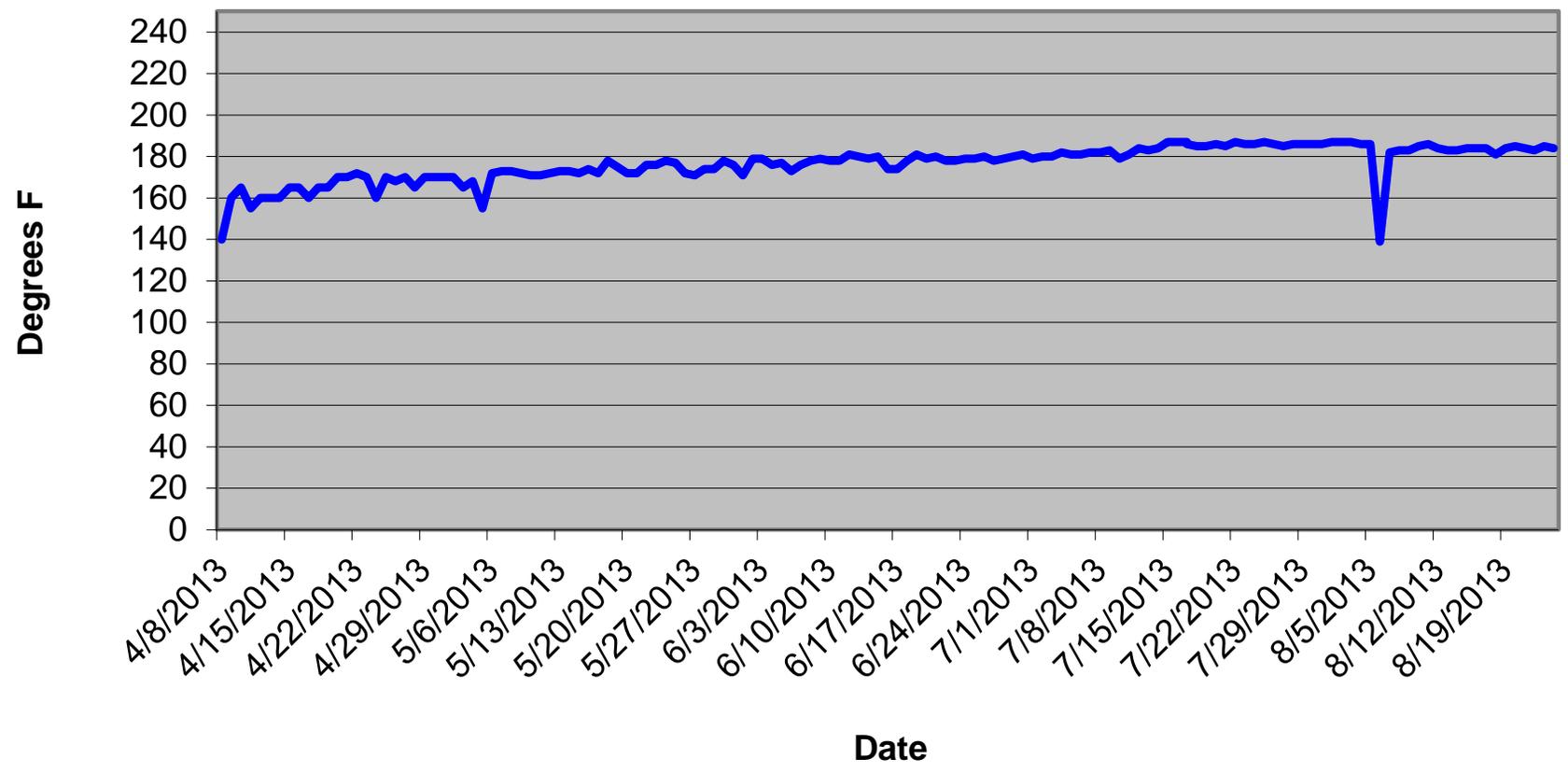
1. From 5/22 - 6/12/13, only the TMP-8 reading at 20' depth was operational. No valid readings were obtained for TMP-8 since 8/1/2013.
2. A new OMEGA dial was installed at TMP-7R on 6/12/2013 enabling more valid readings.
3. No valid readings were obtained for TMP-10 and TMP-12 on 7/18/2013 or 7/25/2013.
4. End terminals were replaced just prior to the 8/6/2013 readings with type T Omega connectors (part # SMPW-CC-T-M) on all TMPs except for TMP-8.

TEMPERATURE VS TIME
BRIDGETON LANDFILL

ATTACHMENT C

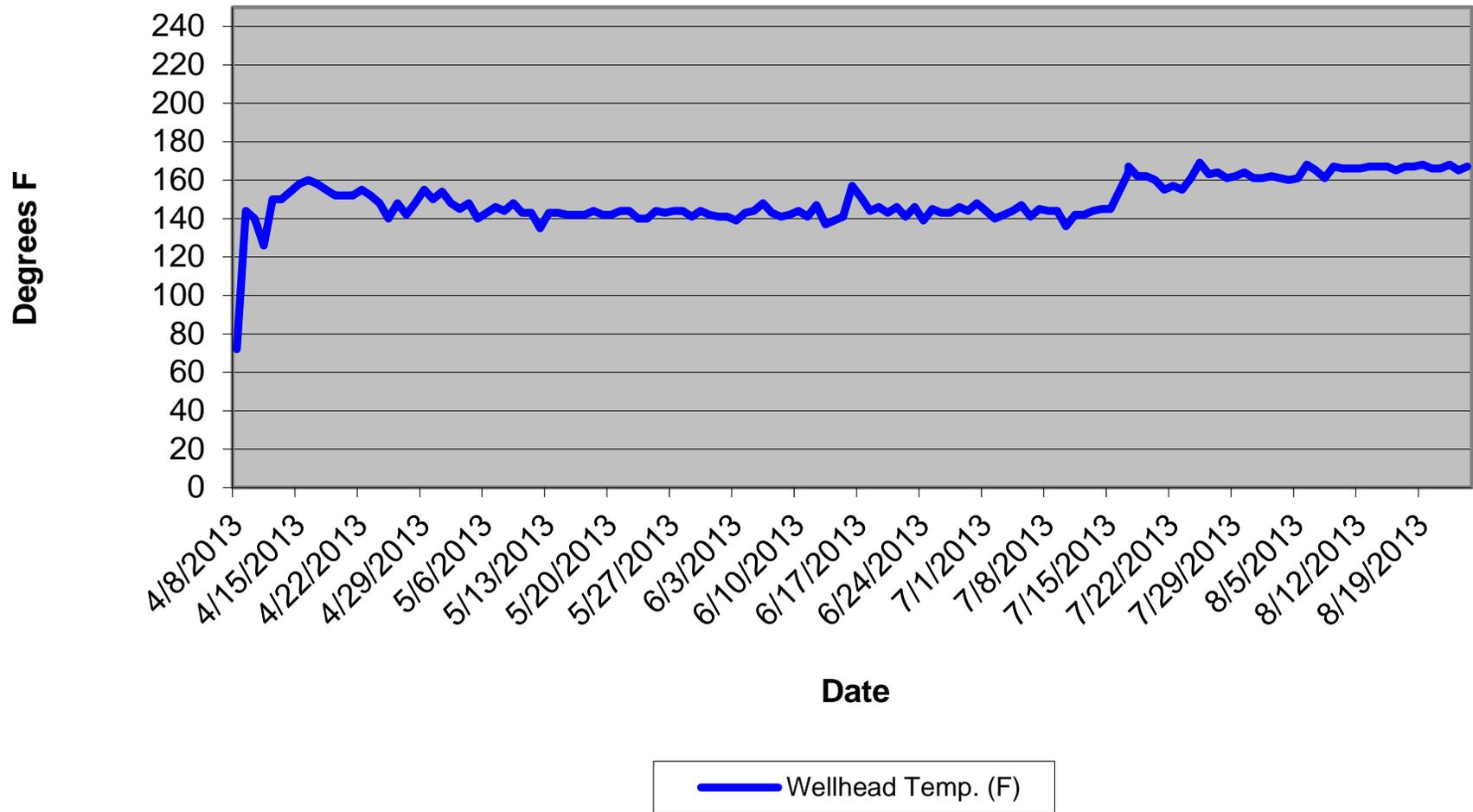
GAS INTERCEPTOR WELLHEAD TEMPERATURE GRAPHS

GIW-1 Wellhead Temperatures

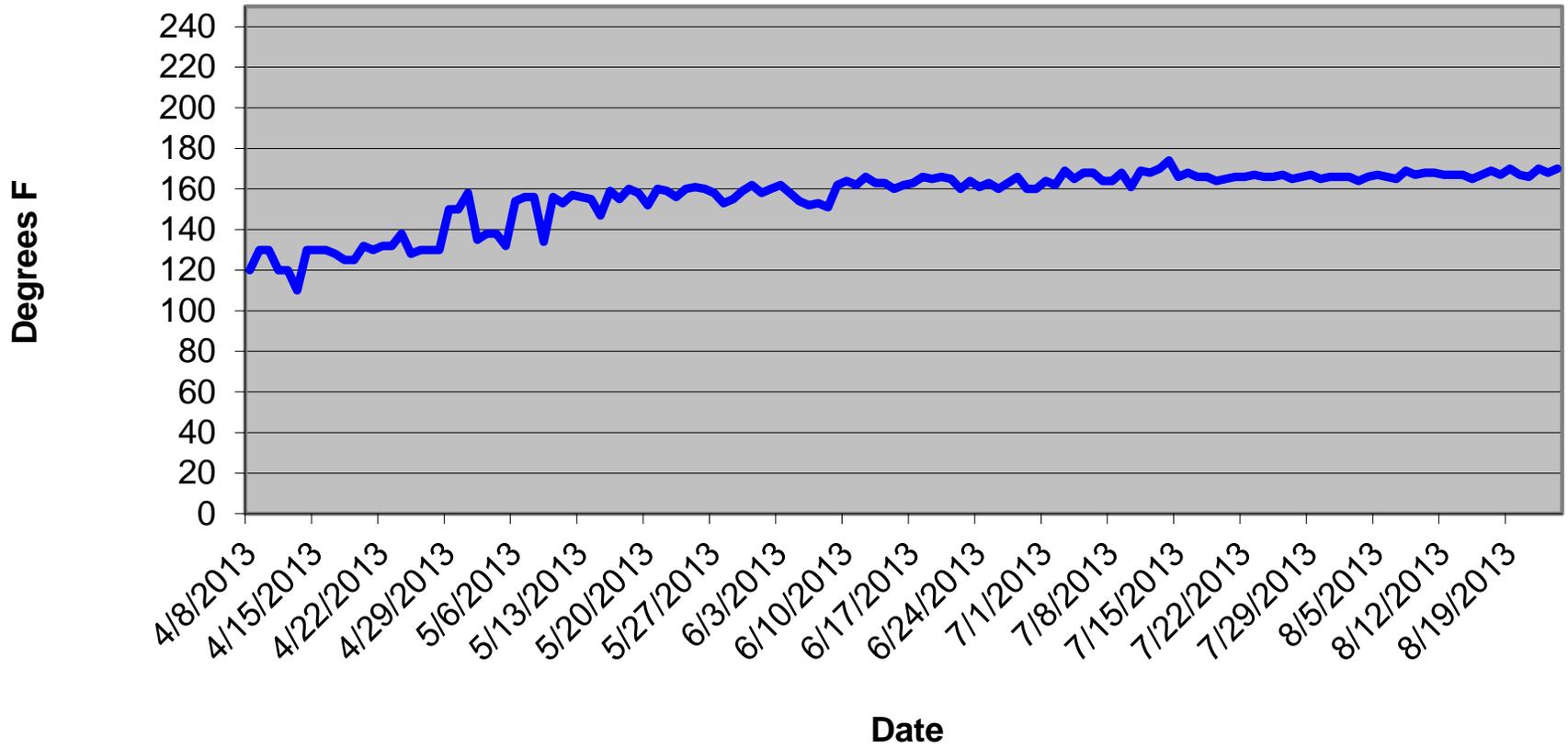


Wellhead Temp. (F)

GIW-2 Wellhead Temperatures

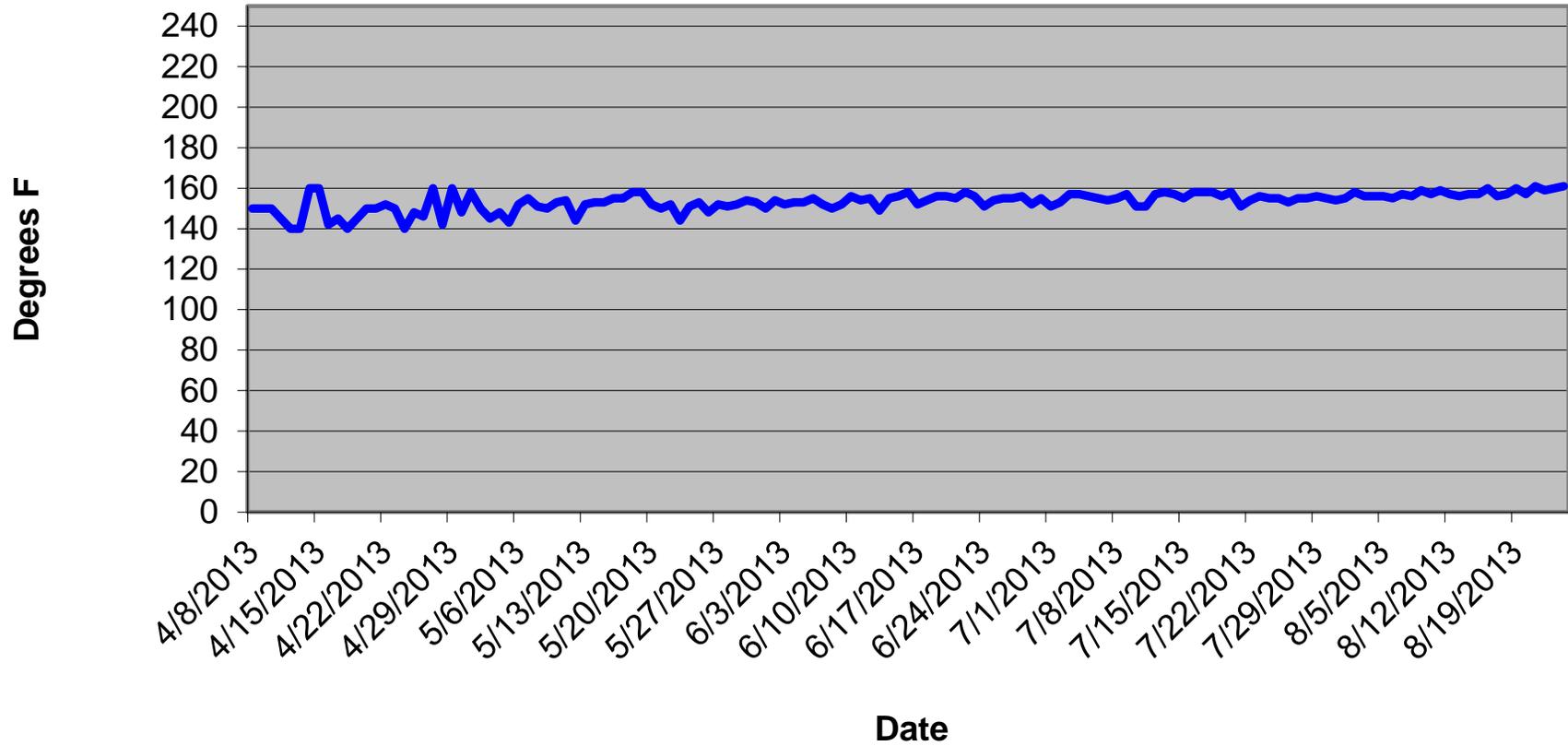


GIW-3 Wellhead Temperatures



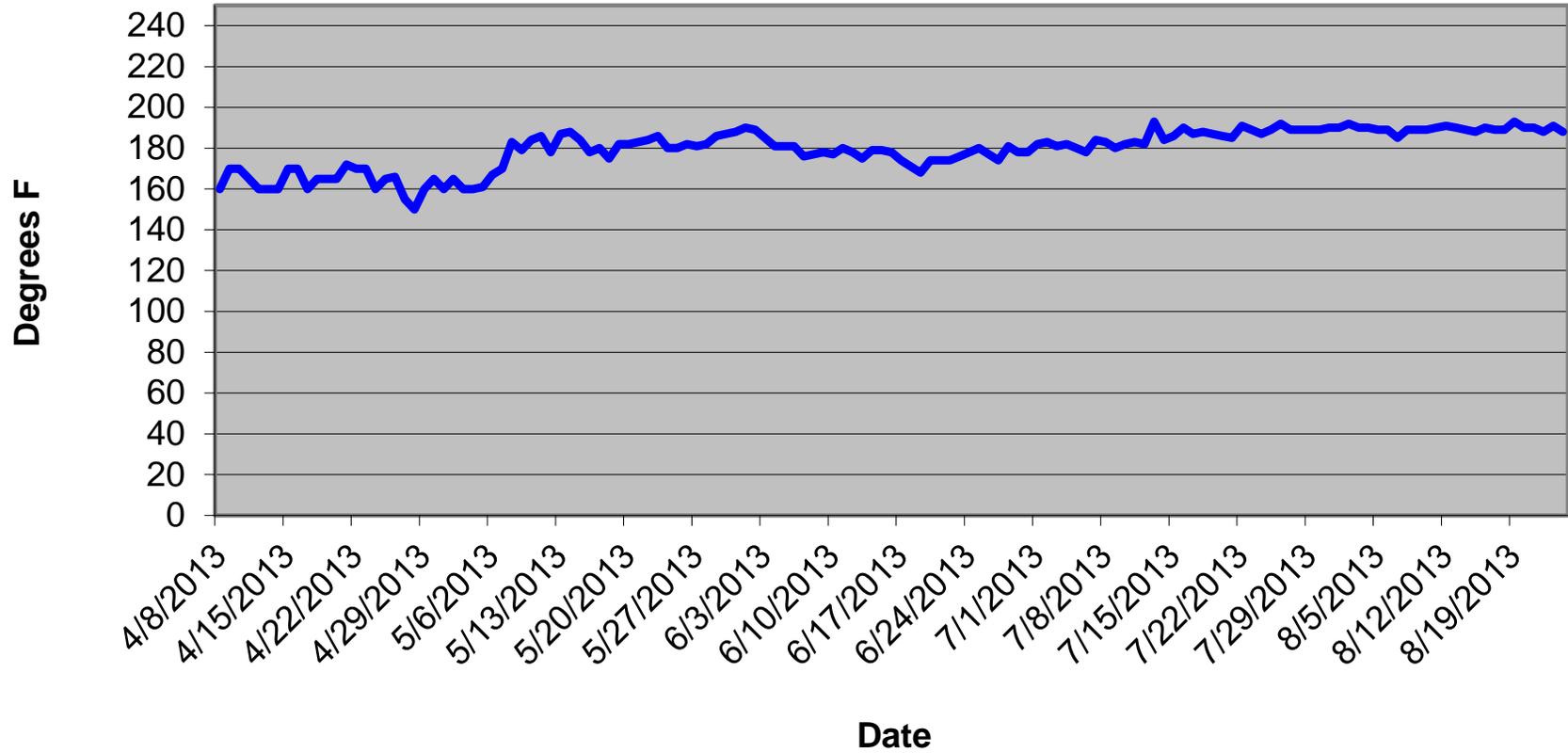
Wellhead Temp. (F)

GIW-4 Wellhead Temperatures



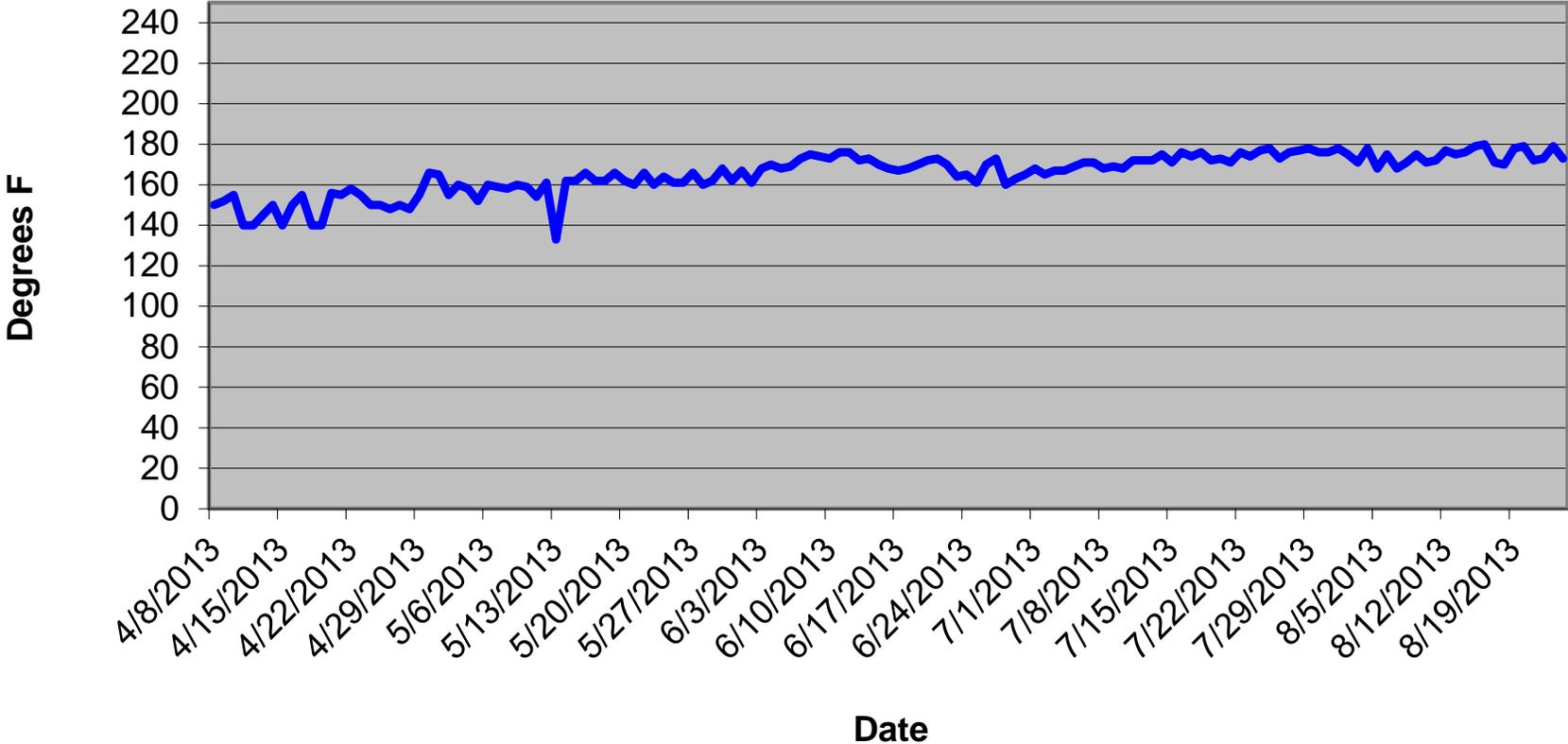
Wellhead Temp. (F)

GIW-5 Wellhead Temperatures



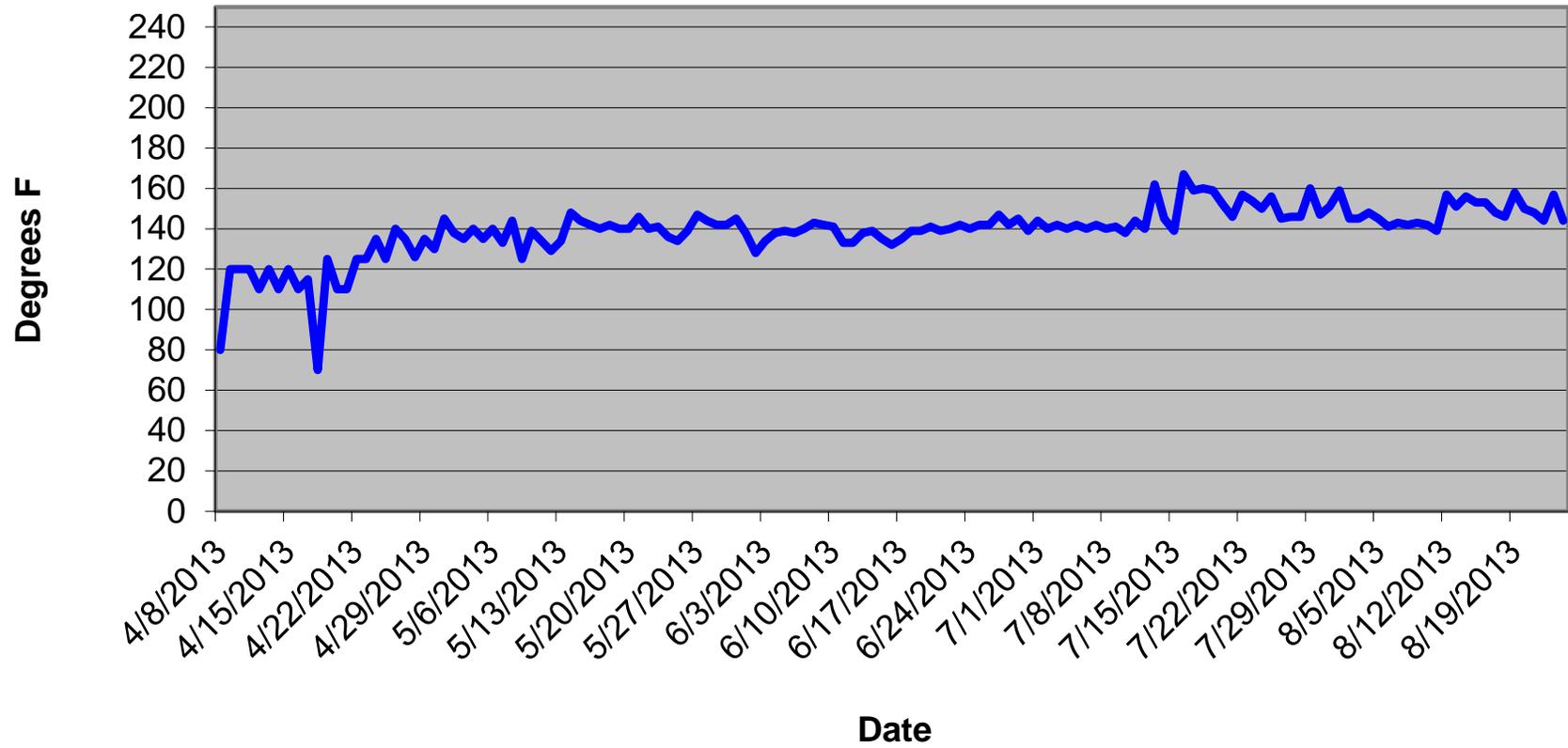
Wellhead Temp. (F)

GIW-6 Wellhead Temperatures



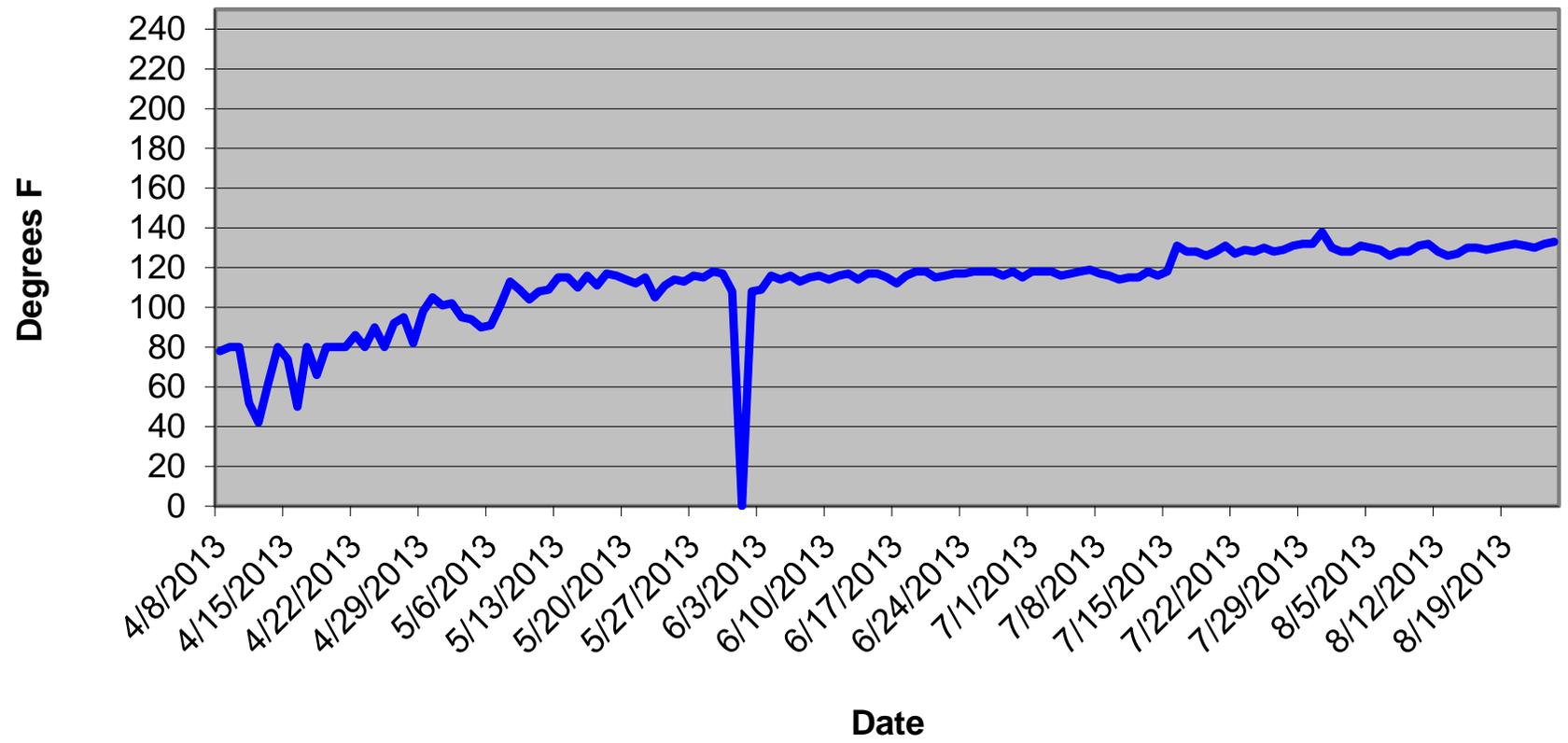
Wellhead Temp. (F)

GIW-7 Wellhead Temperatures



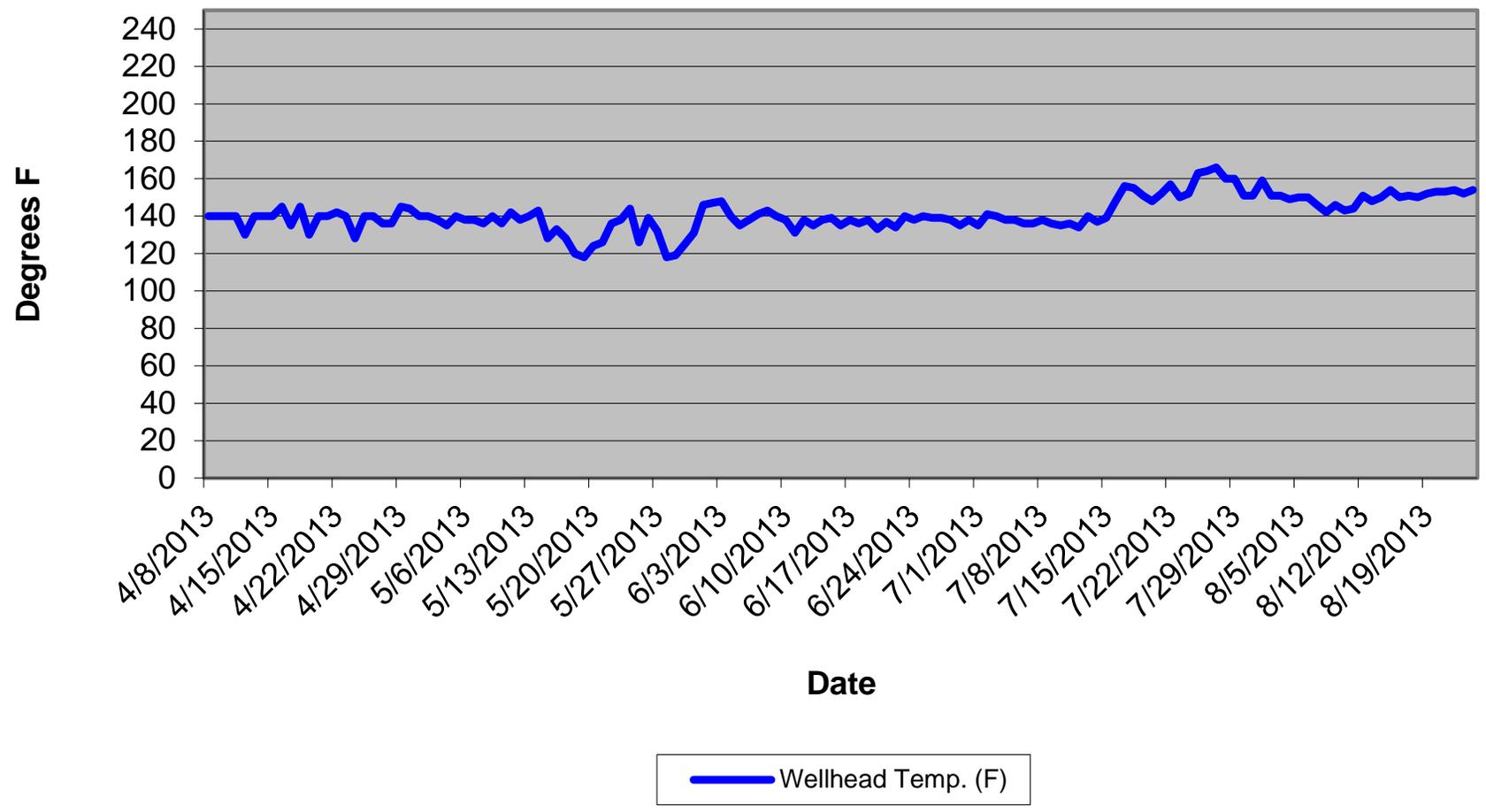
Wellhead Temp. (F)

GIW-8 Wellhead Temperatures

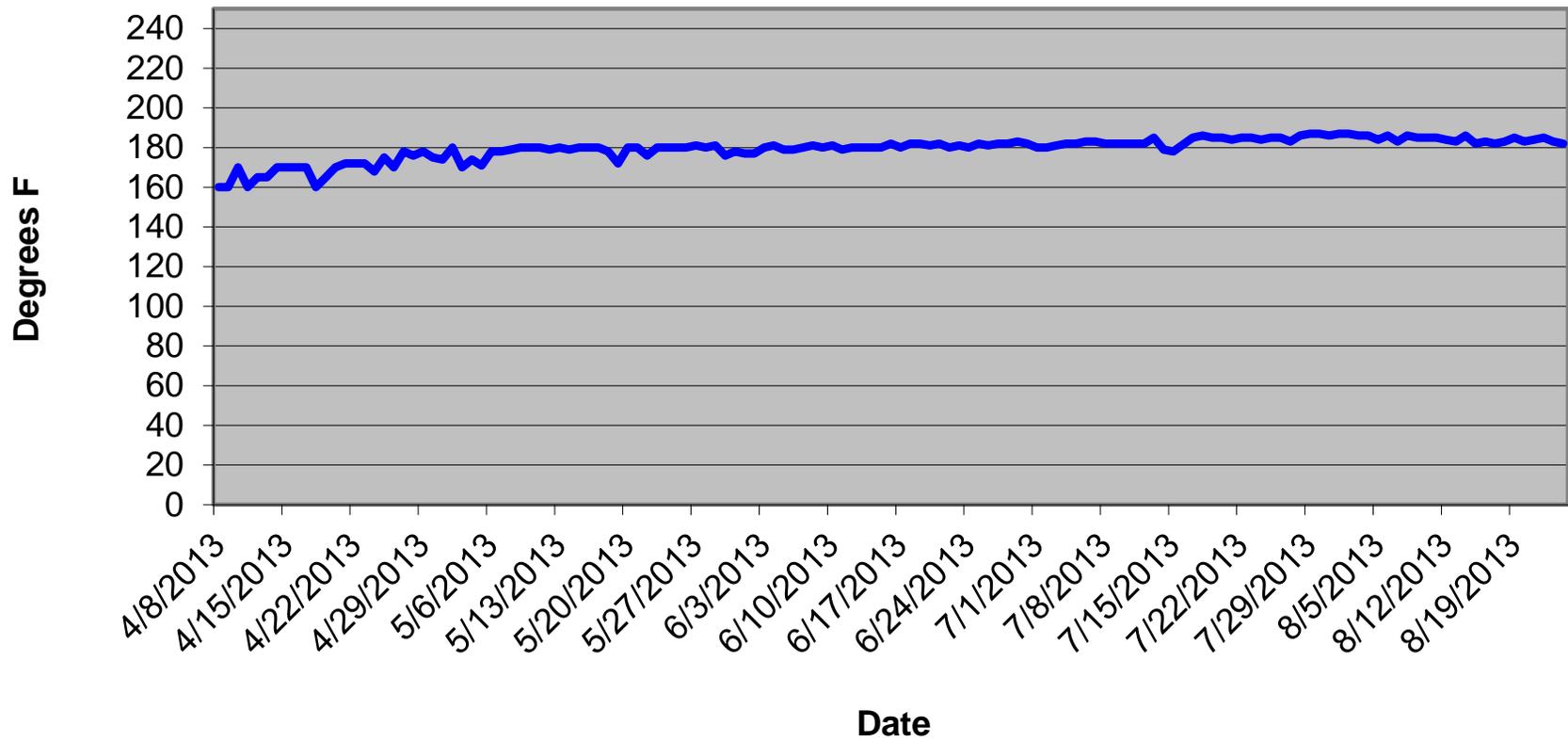


Wellhead Temp. (F)

GIW-9 Wellhead Temperatures

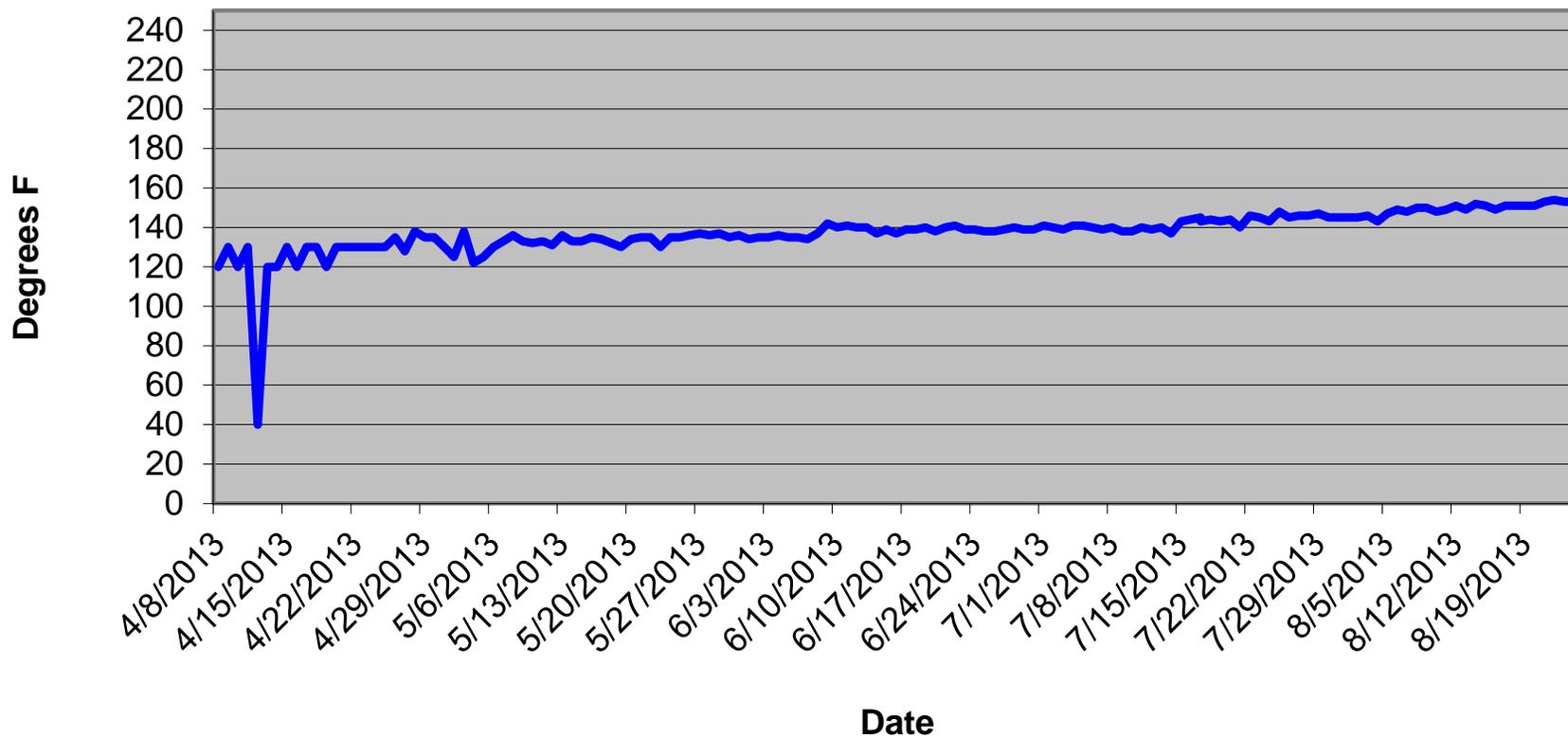


GIW-10 Wellhead Temperatures



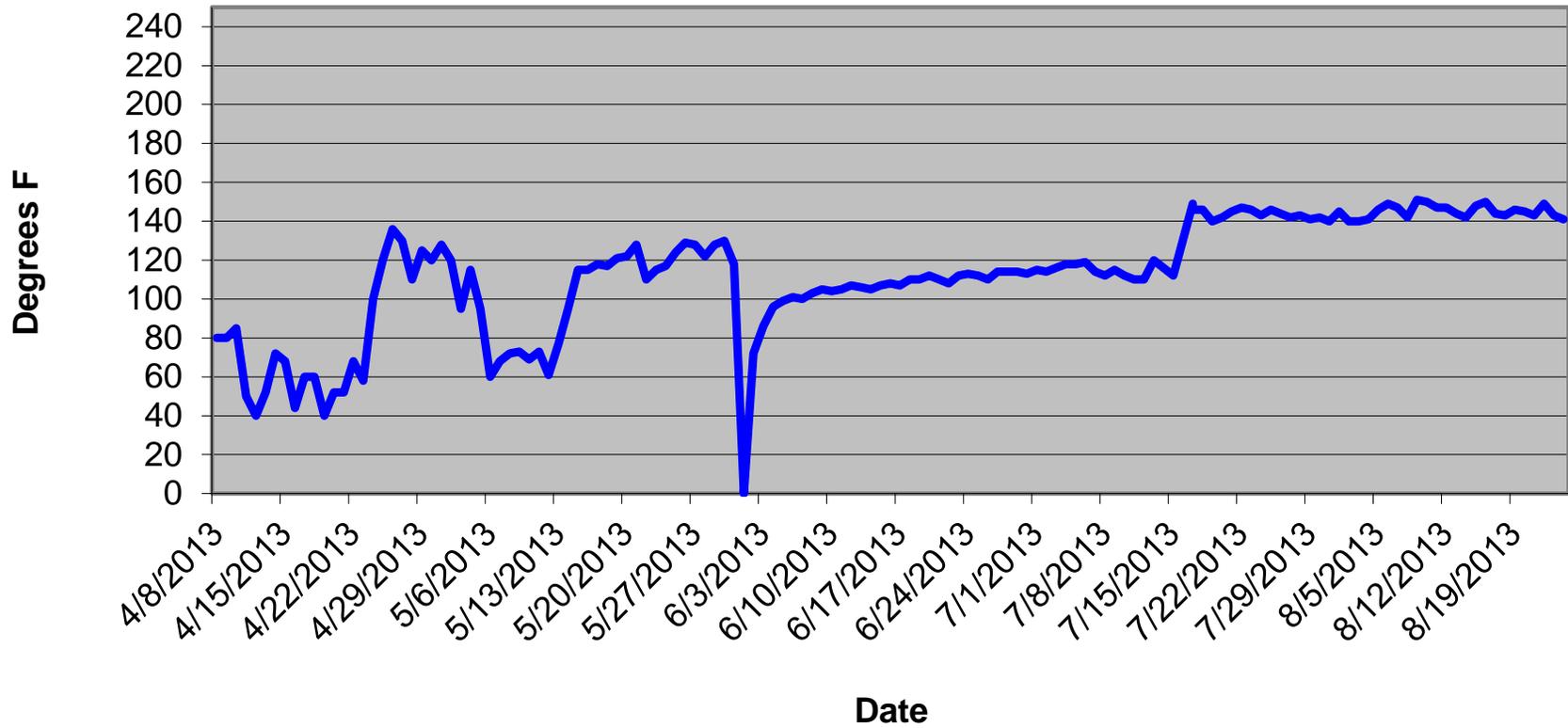
Wellhead Temp. (F)

GIW-11 Wellhead Temperatures



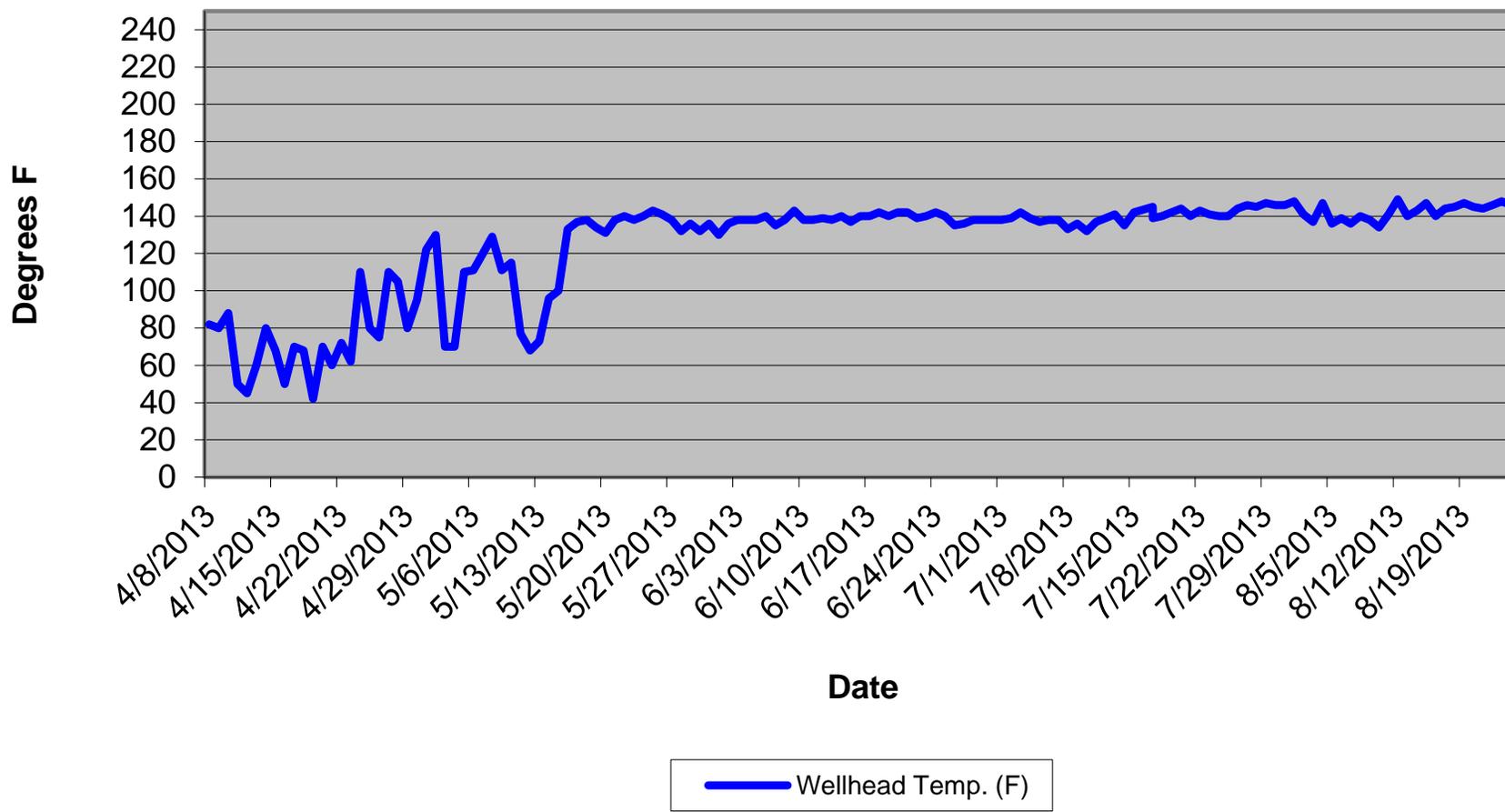
Wellhead Temp. (F)

GIW-12 Wellhead Temperatures



Wellhead Temp. (F)

GIW-13 Wellhead Temperatures



ATTACHMENT D

GAS WELL GEW-54 WELLHEAD TEMPERATURE

Weekly Wellhead Temperature Monitoring of GEW-54 (North Quarry)

<u>Date</u>	<u>Time</u>	<u>Temperature Reading</u>
7/22/13	5:11 PM	149° F
7/30/13	9:30 AM	148° F
8/05/13	8:51 PM	152° F
8/12/13	11:57 AM	144° F
8/19/13	7:23 AM	143° F
8/26/13	7:45 AM	143° F