

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

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**

April 1, 2014

Commentary on Data

Attachment A – Leachate Levels in Leachate Collection Sumps

LCS -2,-3D, -5, and -6 were operational during the weekly reporting period.

LCS-4B still exhibits excess pressure and liquid ejection, so it has not been fitted with a pump; however, the conditions are resulting in leachate removal from that location. The option of utilizing a progressive-cavity pump at this location is being evaluated.

The transducer in LCS-3D is not currently working. Evaluation of alternative measurements are being considered for LCS-3D and -1.

Repairs for LCS-1 is scheduled to be completed in April.

Temperature Monitoring Probe Analytical Charts

The following TMPs indicated consistent or lower temperature profiles than previous week(s): TMP-1,-2, -3,-4,-6,-7R,-8, -9, -10, and -12.

TMP-11 and -14 have shown higher temperatures recently at shallow depths from surface. The higher temperatures at these locations are scheduled for evaluation. The evaluation will include conductivity measurements of suspect points with adjacent thermocouple wires and direct measurements of select thermocouple wires. These readings appear to be irregular compared with readings at lower elevations in the same monitoring probe and with historic profiles at the facility.

Irregular resistivity readings appear to be attributed to the irregular resistivity in the thermocouples. This is prevalent at multiple depths at TMP -5 and -13. Consistent with MDNR's direction, the weekly reports exclude data that is not validated. Because TMP -5 and -13 have irregular resistivity at multiple depths, they no longer provide valid data and are no longer being included in the data reports.

Gas Interceptor Wellhead Temperature Graphs

The fluctuation in wellhead gas temperatures can be attributed to variation in available vacuum, gas flow and ambient temperatures at the respective well.

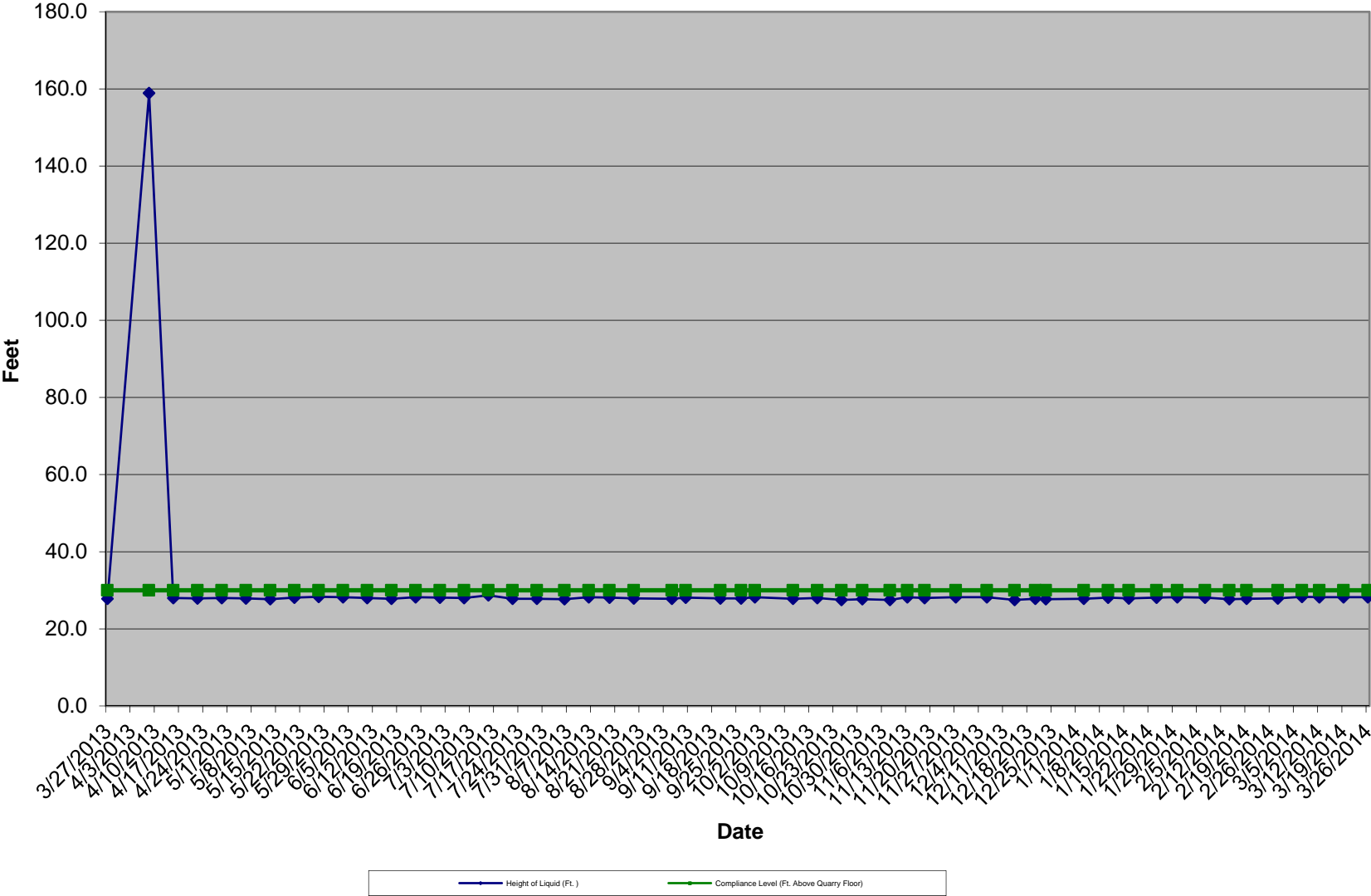
All gas interceptor wells remained relatively consistent or lower with regards to gas wellhead temperature measured at each location.

The water circulation cooling loop is currently installed in GIW-4. The cooling loop was operational for the reporting week.

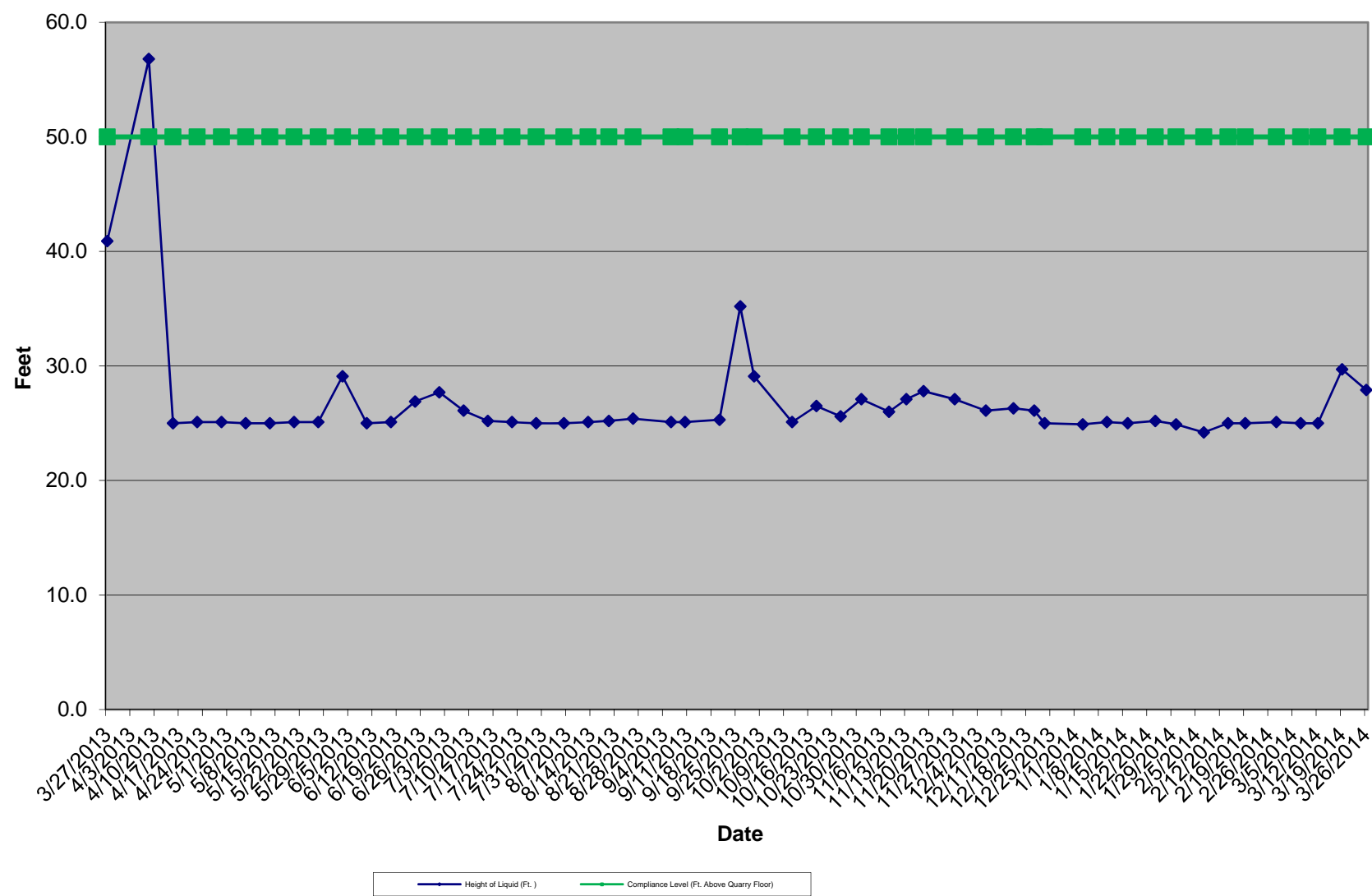
ATTACHMENT A

LEACHATE LEVELS IN LEACHATE COLLECTION SUMPS

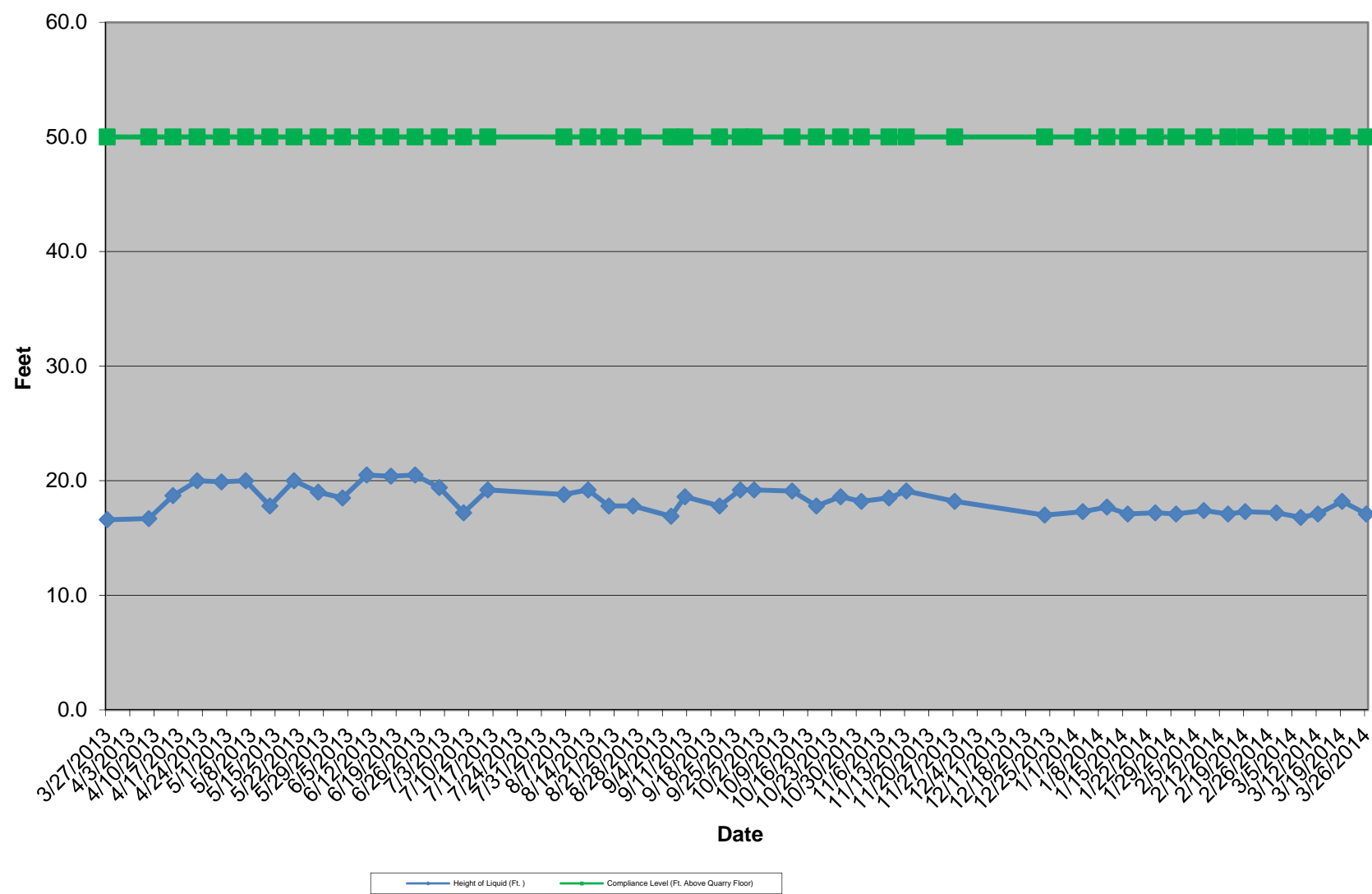
LCS-2D Liquid Level Above Quarry Floor



LCS-5A Liquid Level Above Quarry Floor



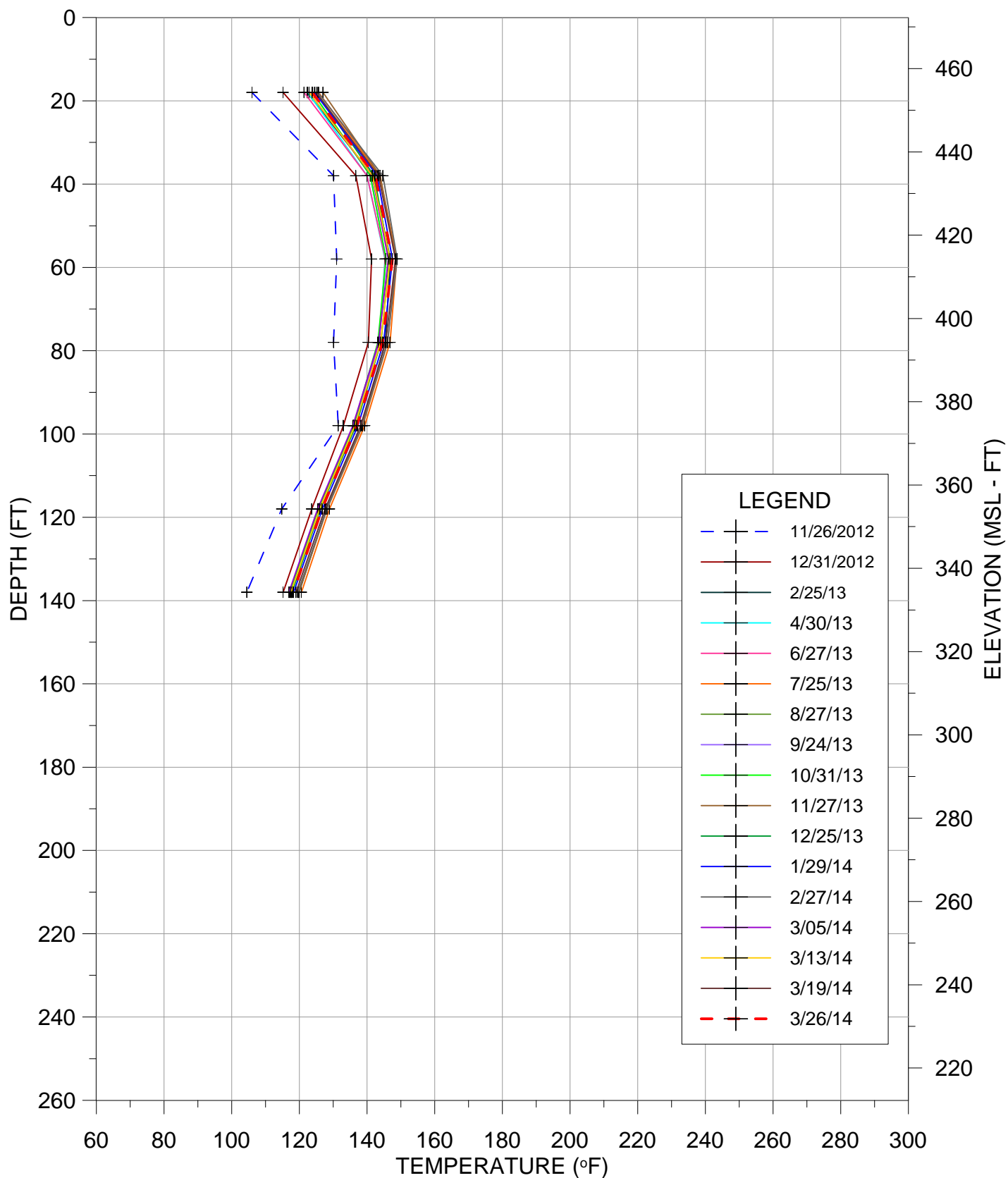
LCS-6B Liquid Level Above Quarry Floor



ATTACHMENT B

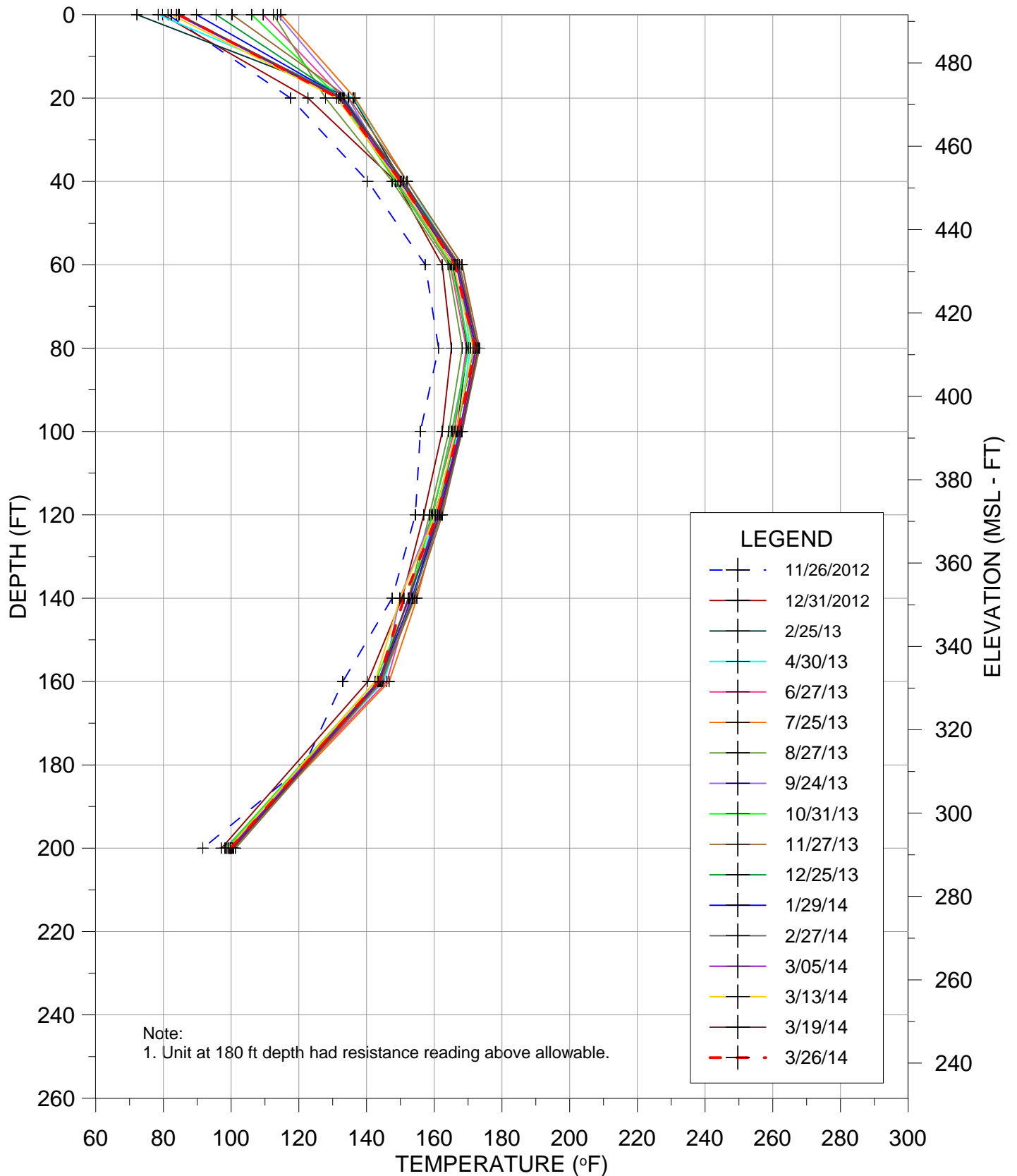
TEMPERATURE MONITORING PROBE ANALYTICAL CHARTS

TMP-1



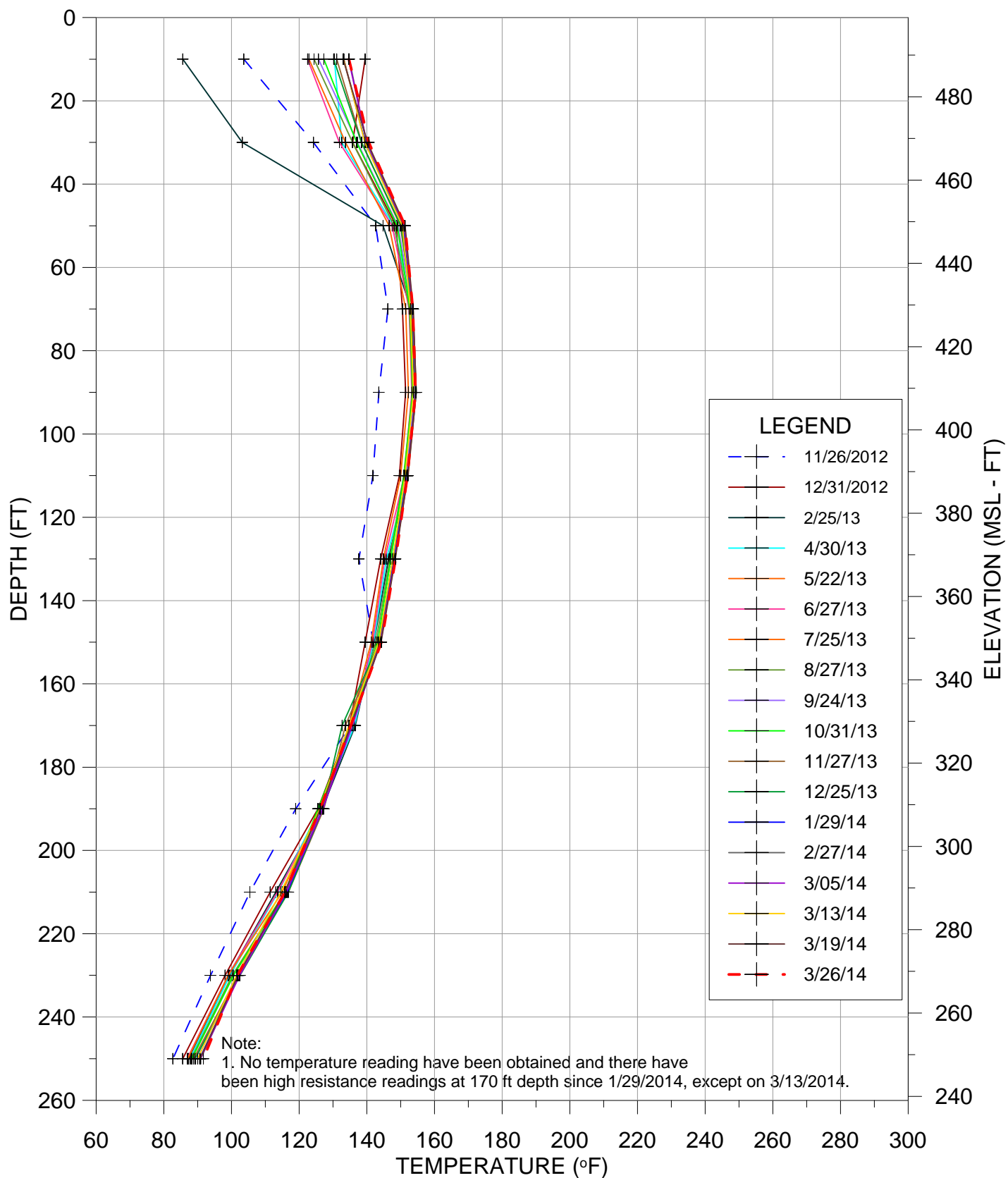
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-2



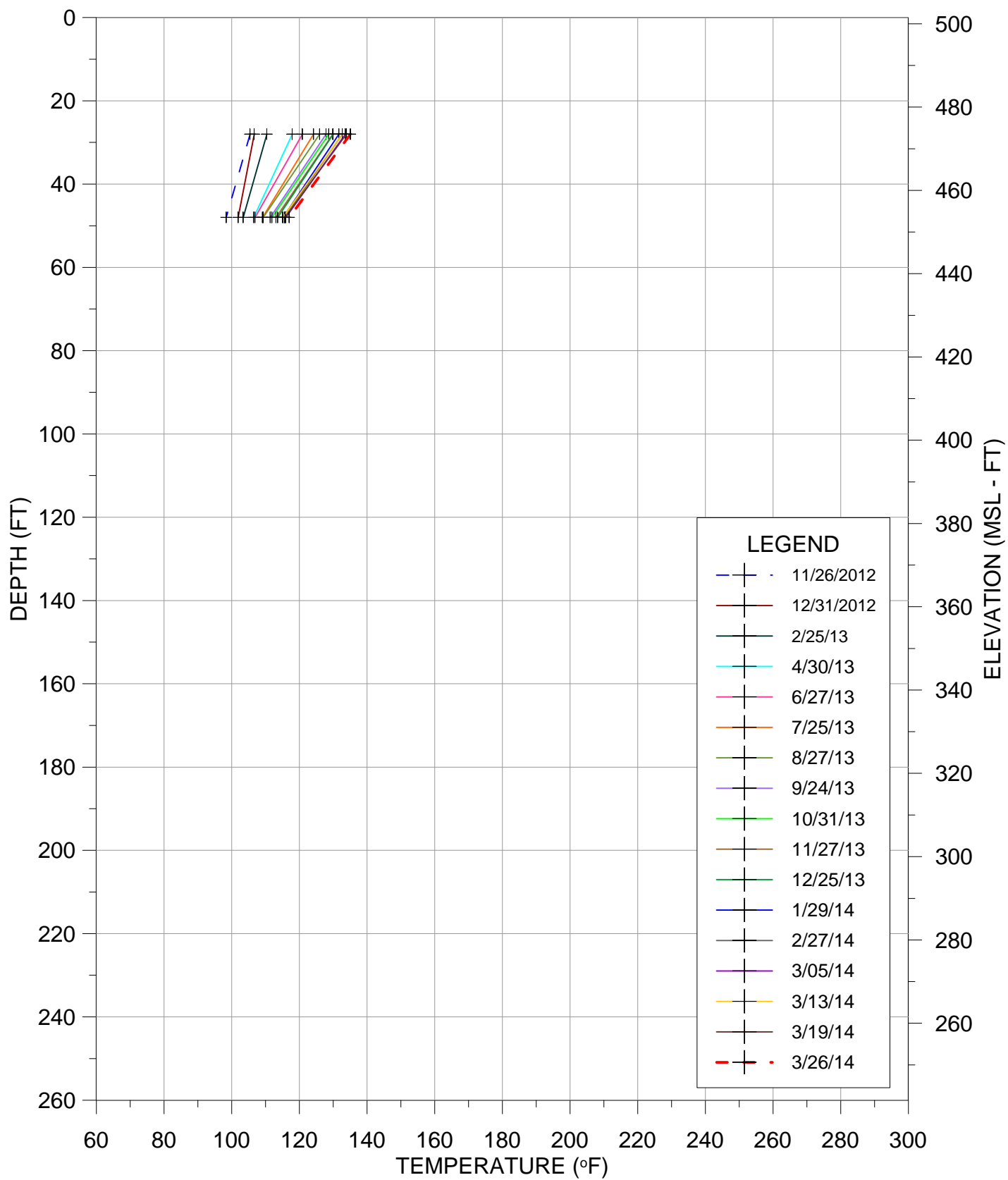
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-3



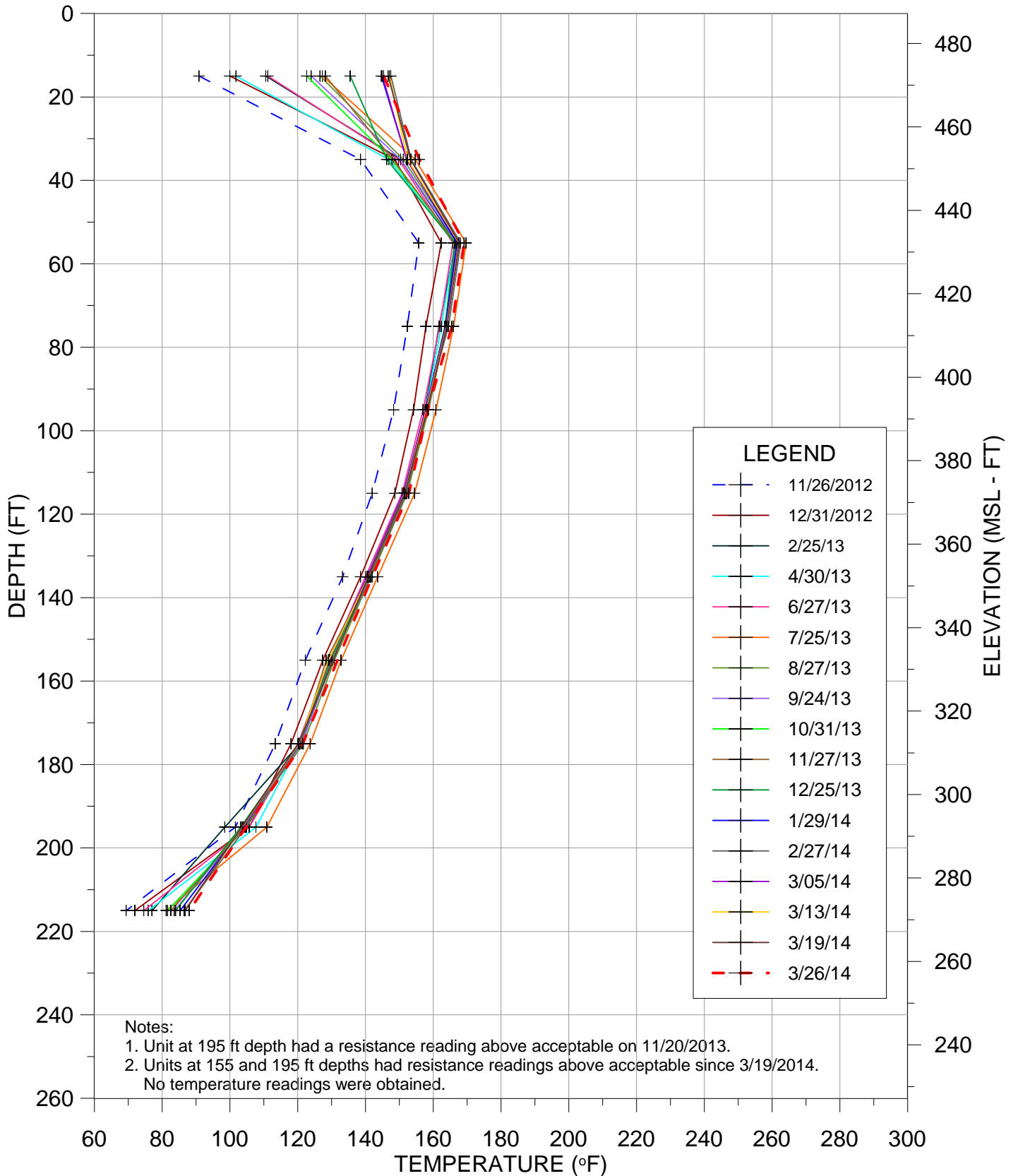
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-4

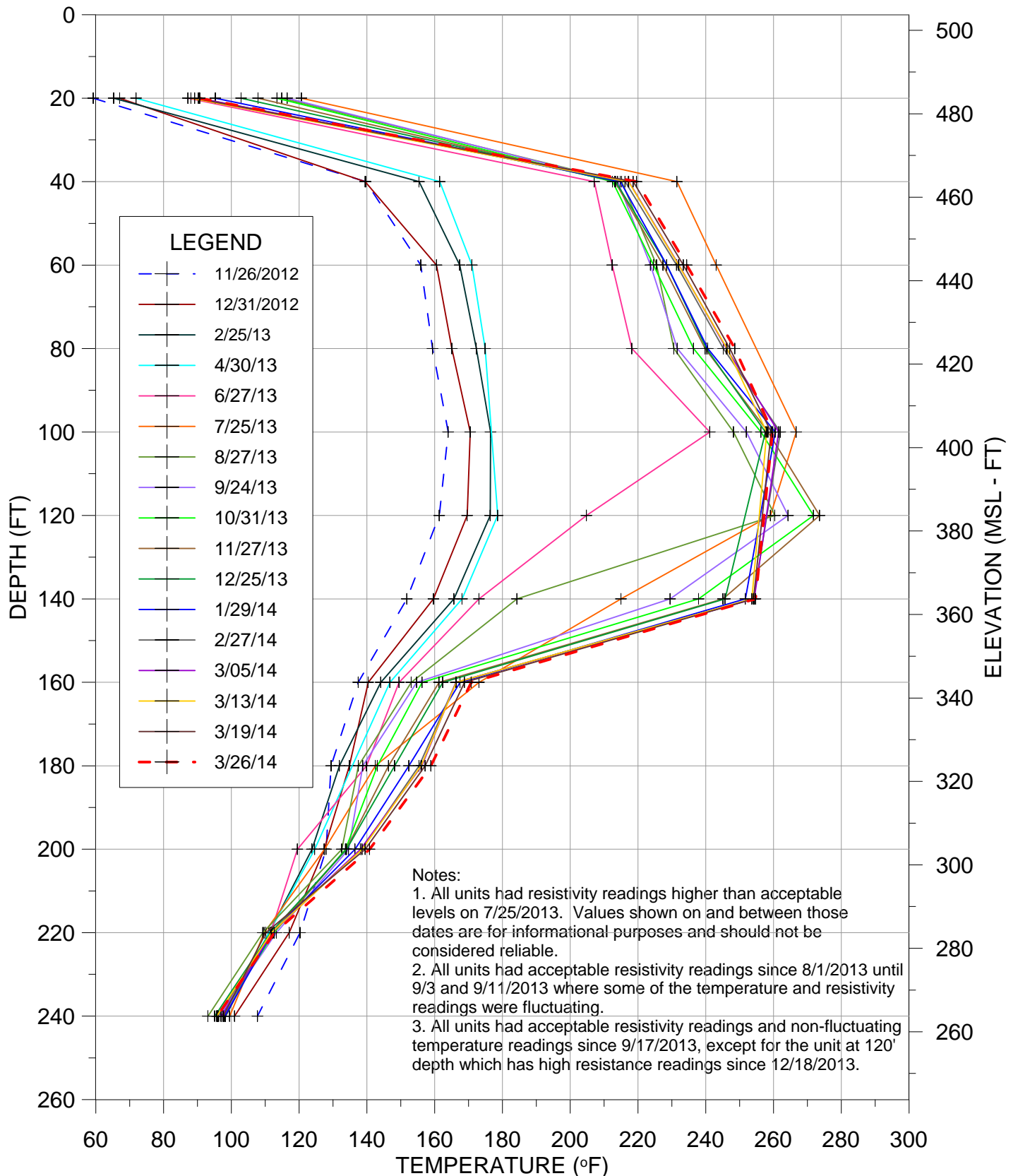


TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-6

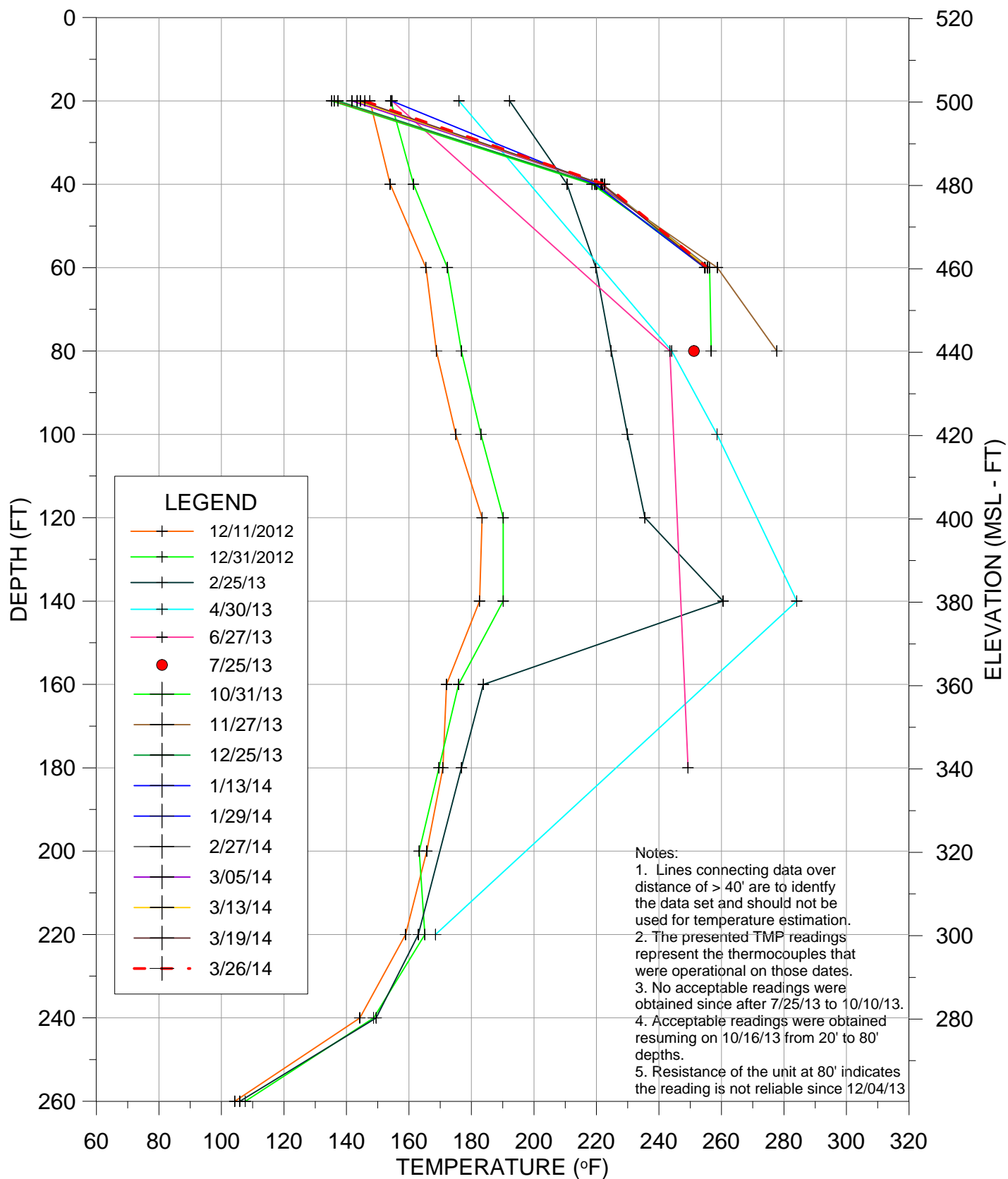


TMP-7R



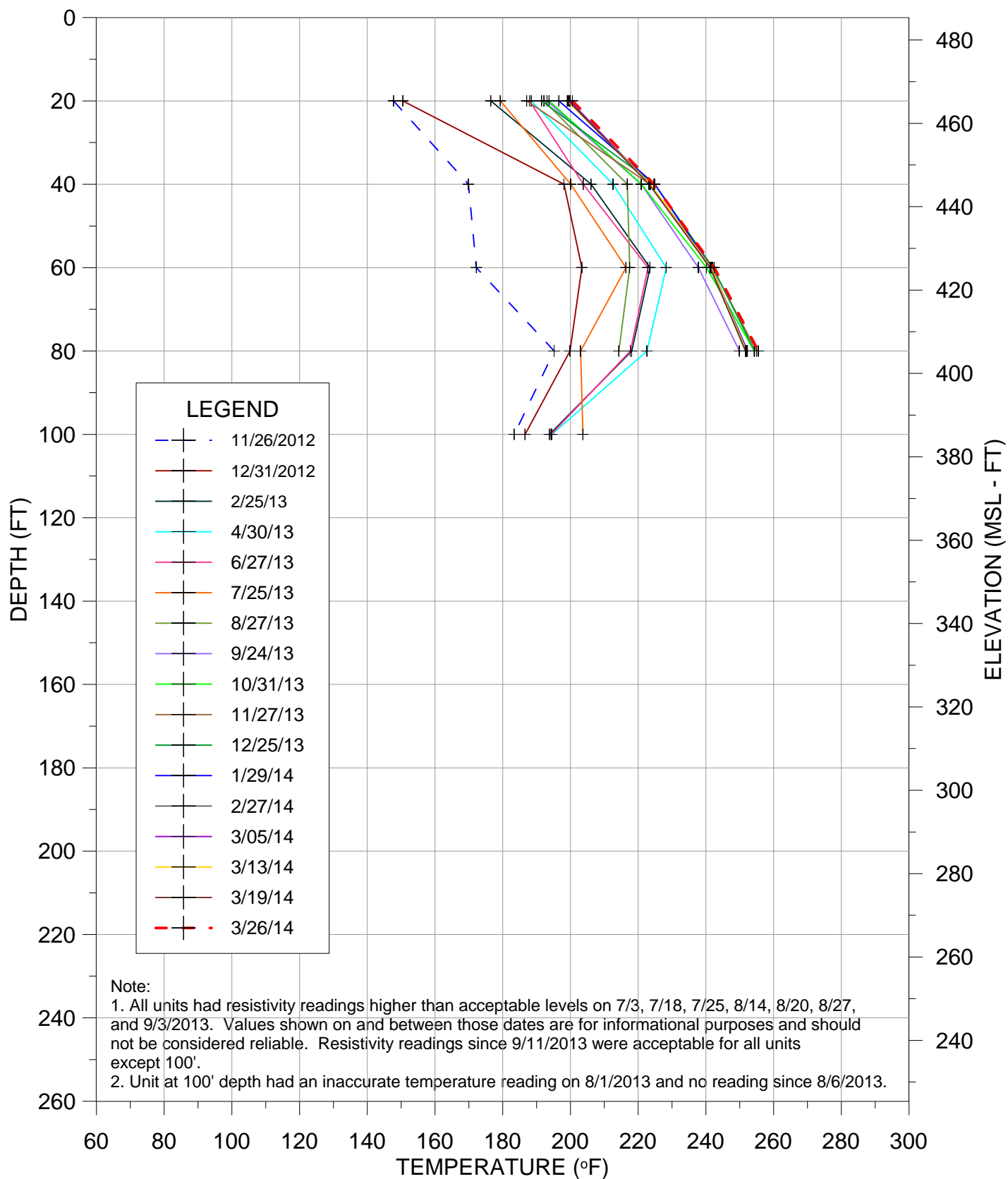
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-8

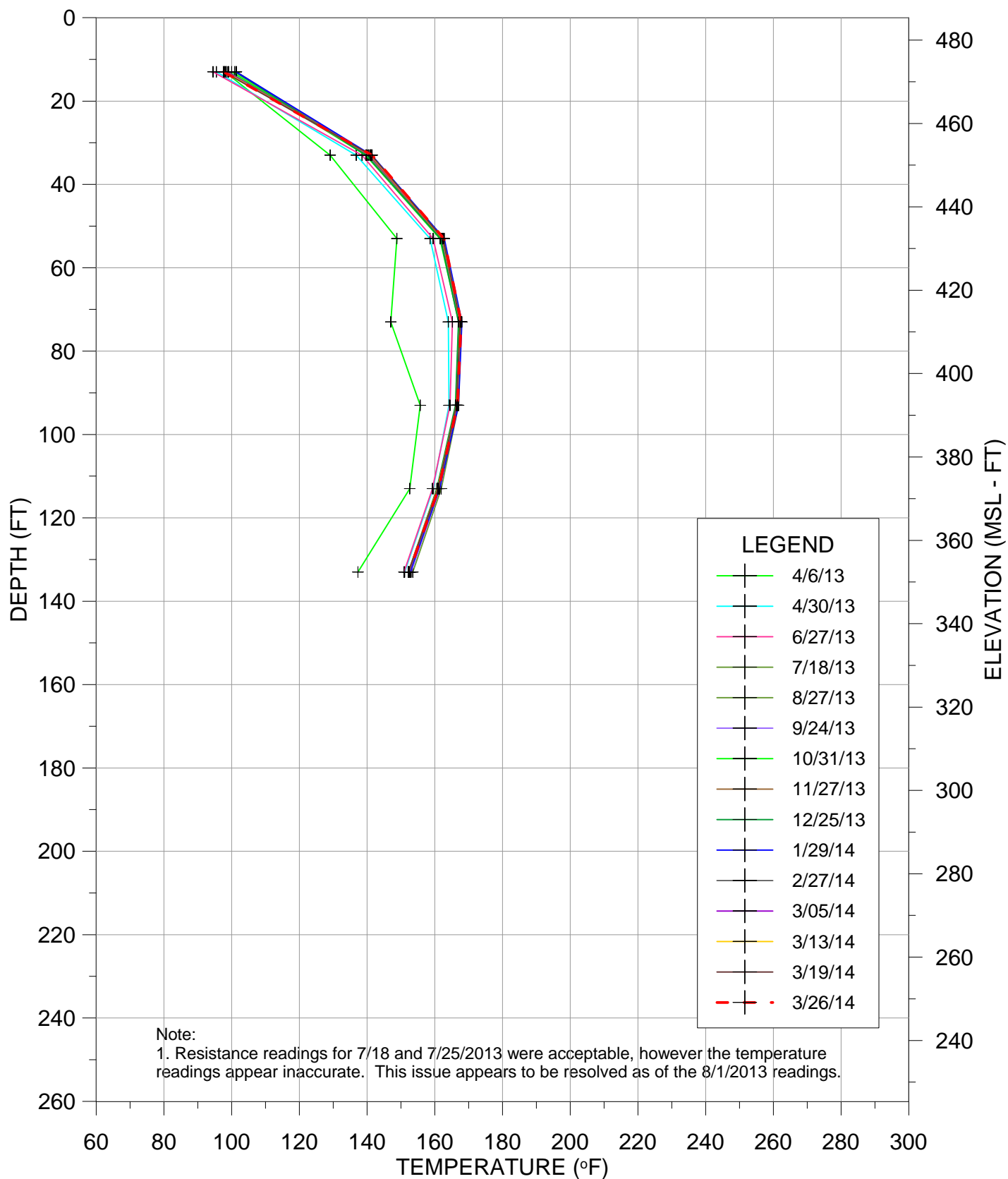


TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-9

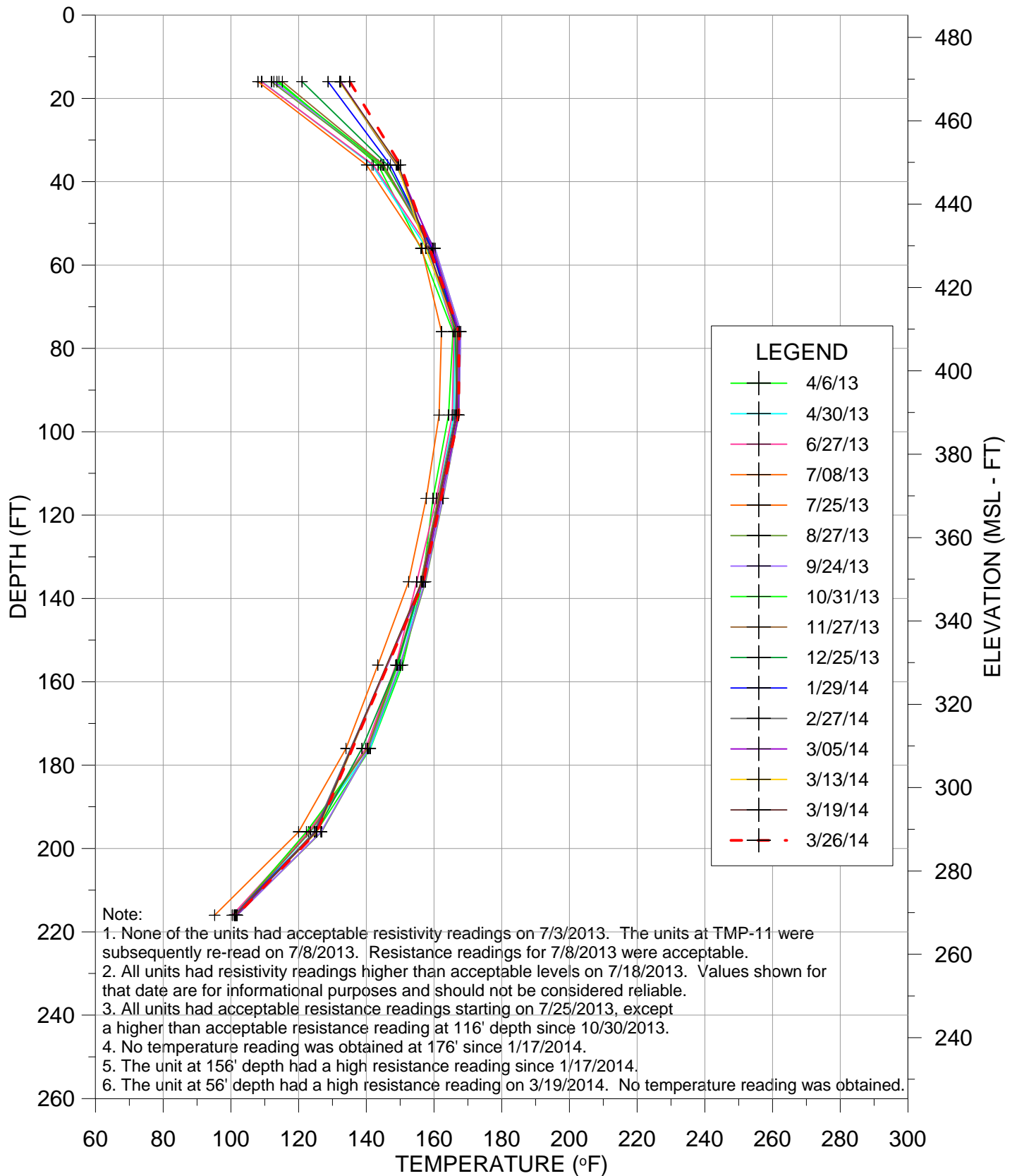


TMP-10

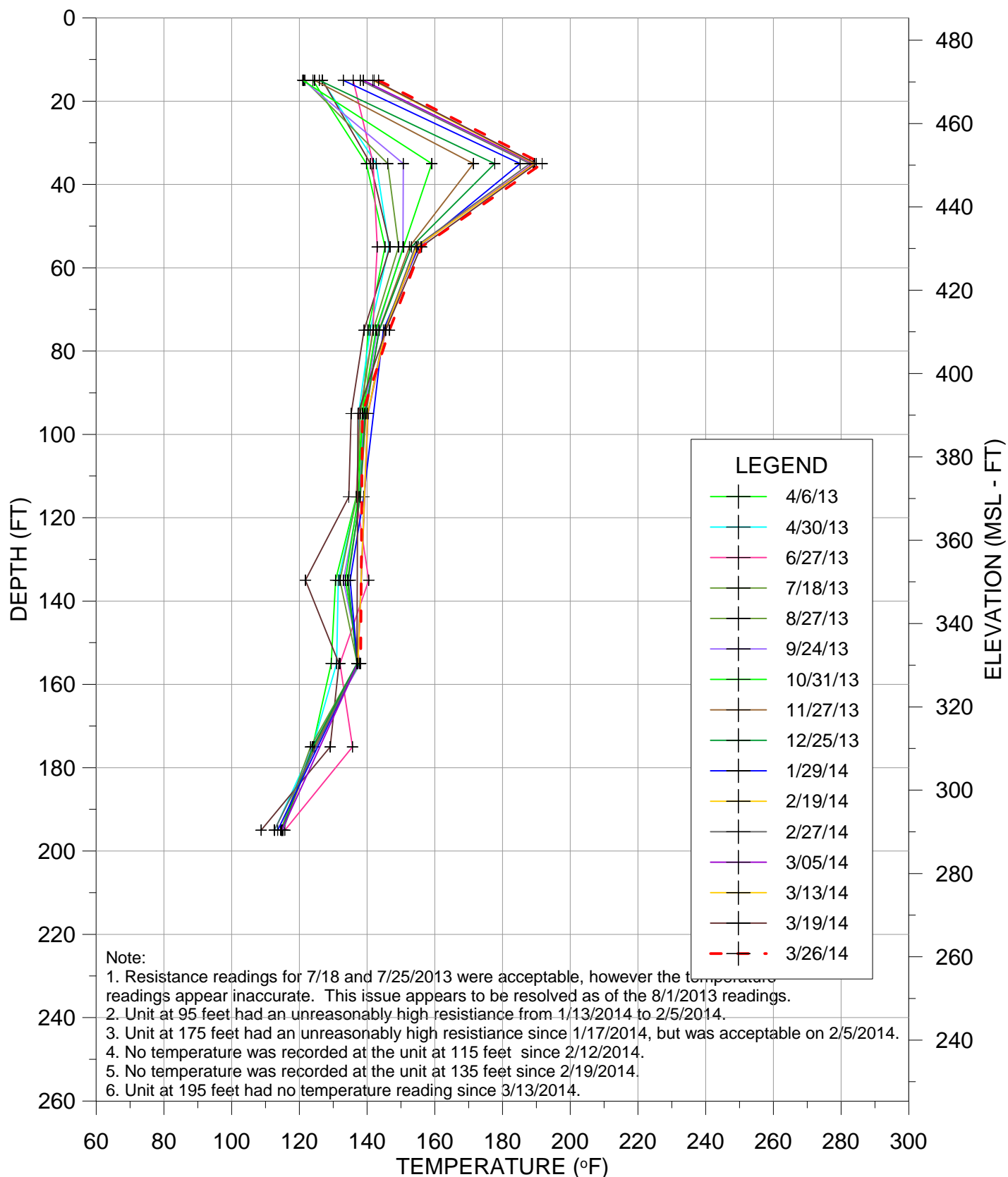


TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

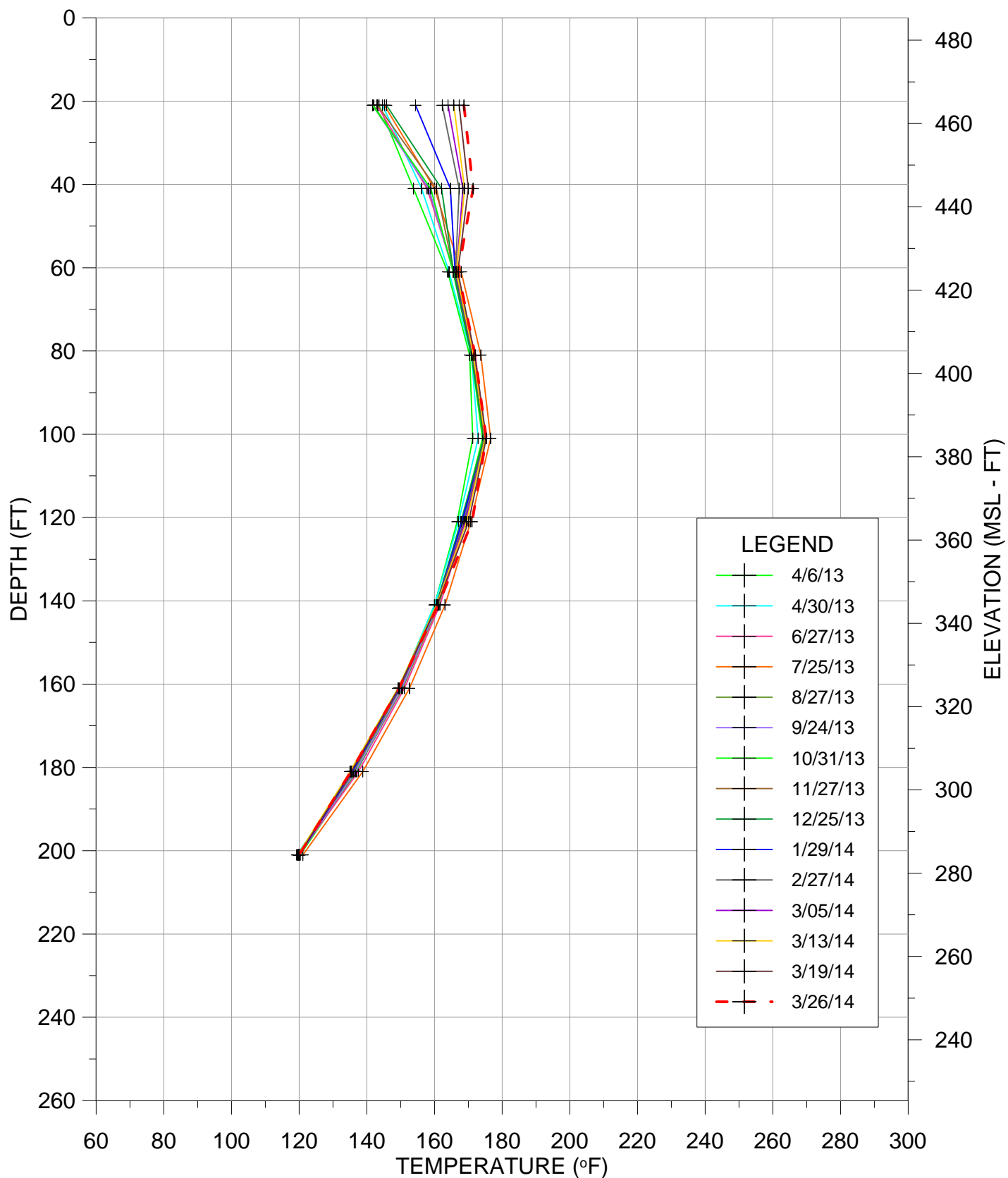
TMP-11



TMP-12

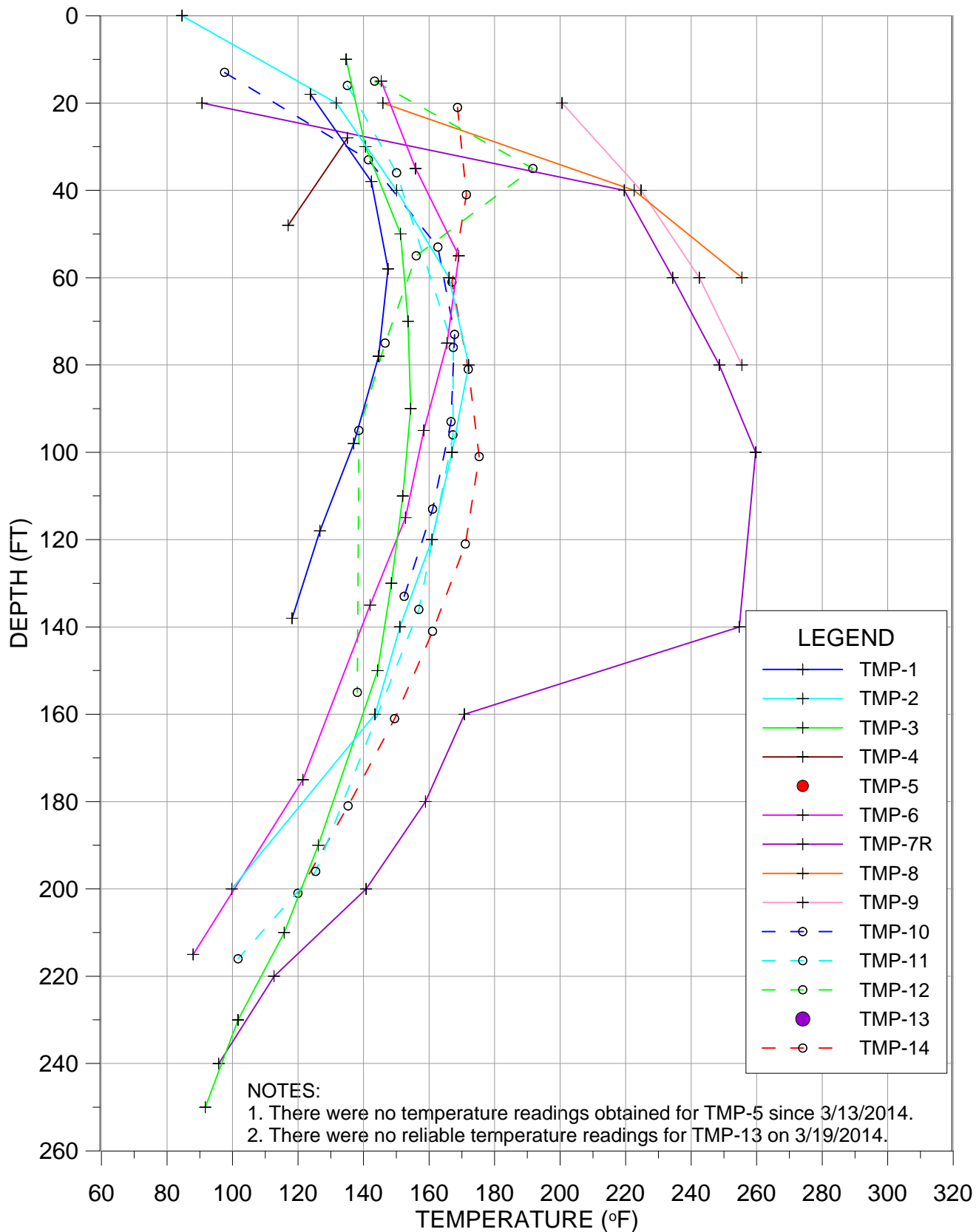


TMP-14



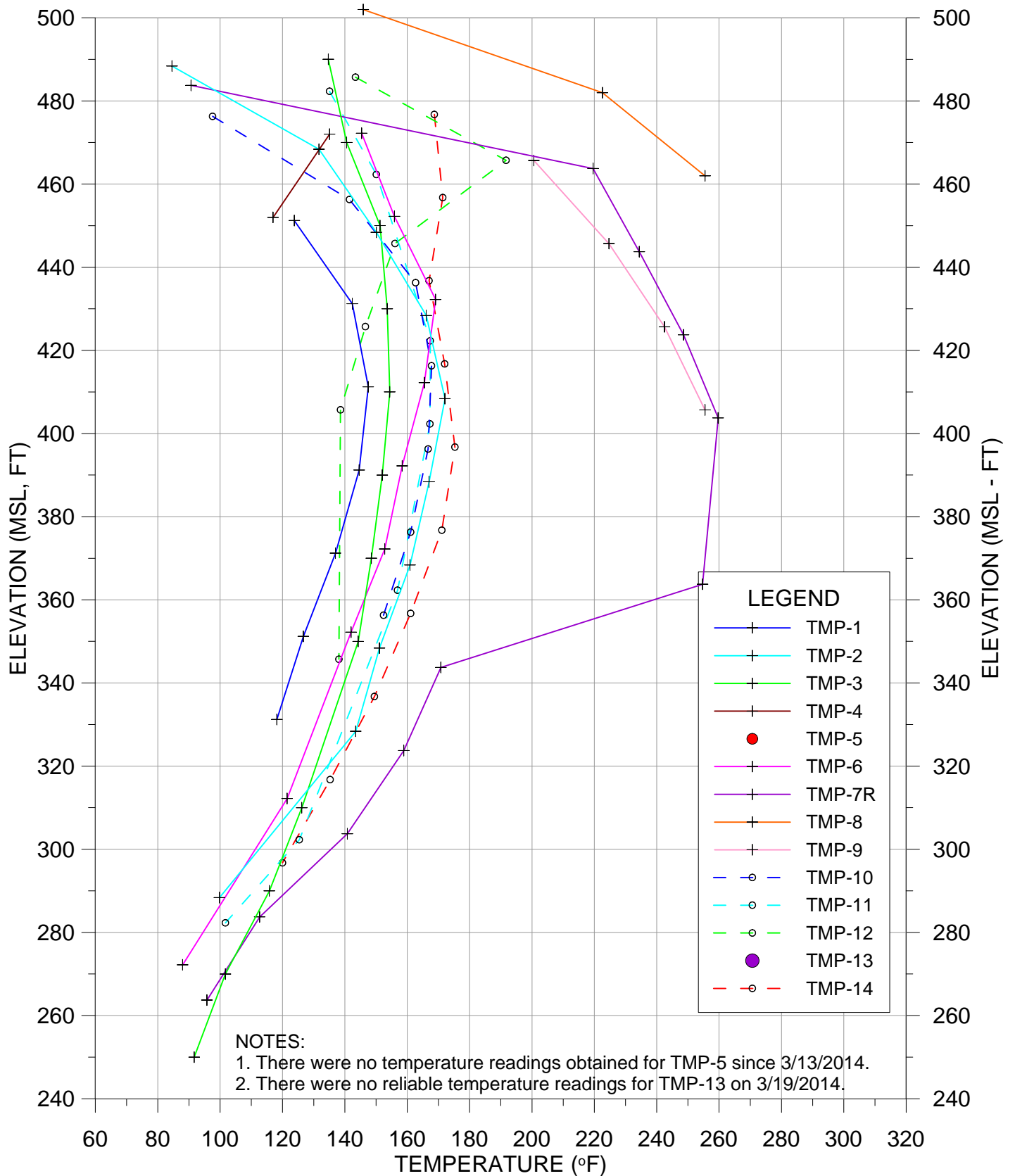
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

03/26/2014 -DEPTH



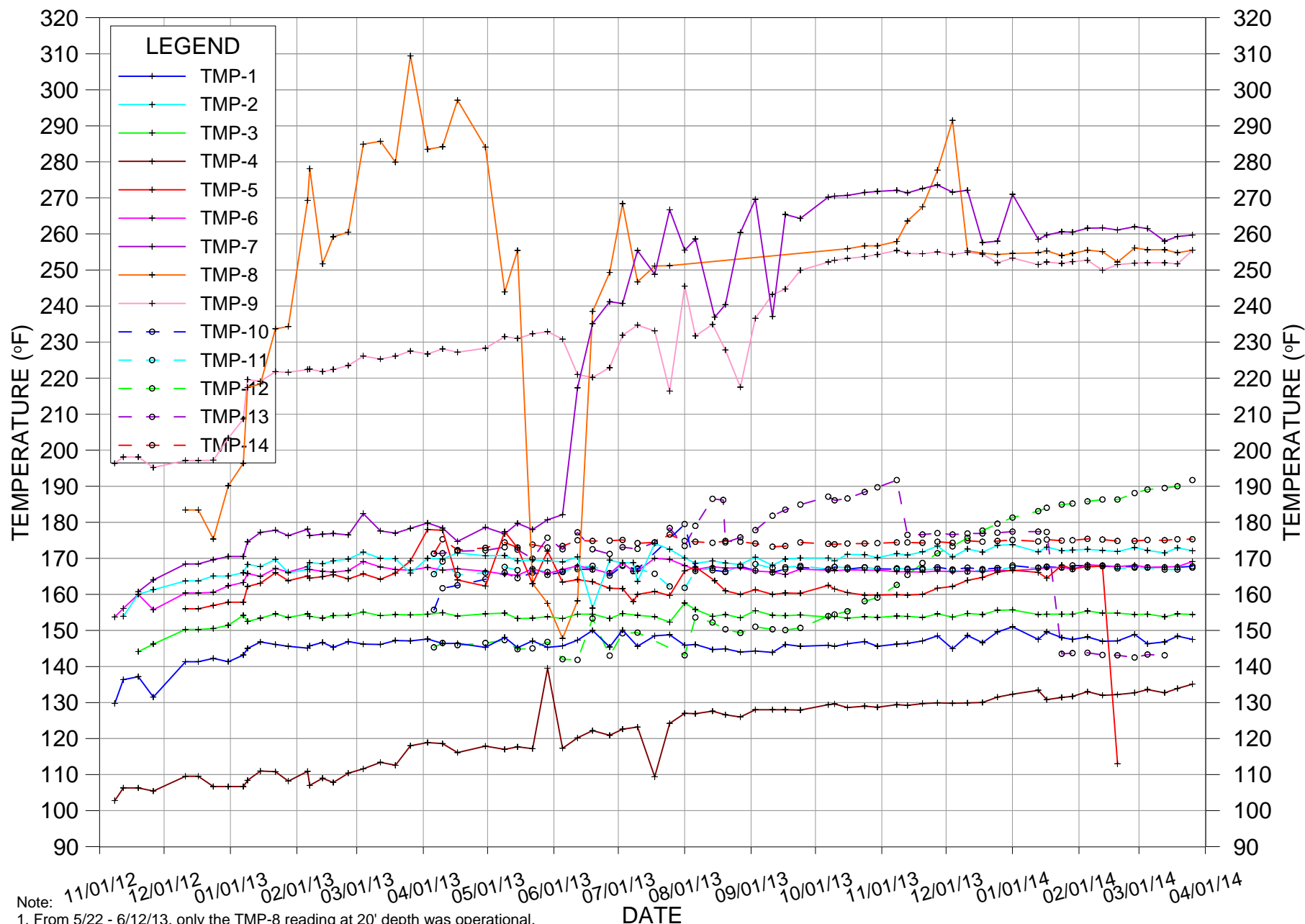
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

03/26/2014 - ELEVATION



TEMPERATURE VS ELEVATION
BRIDGETON LANDFILL

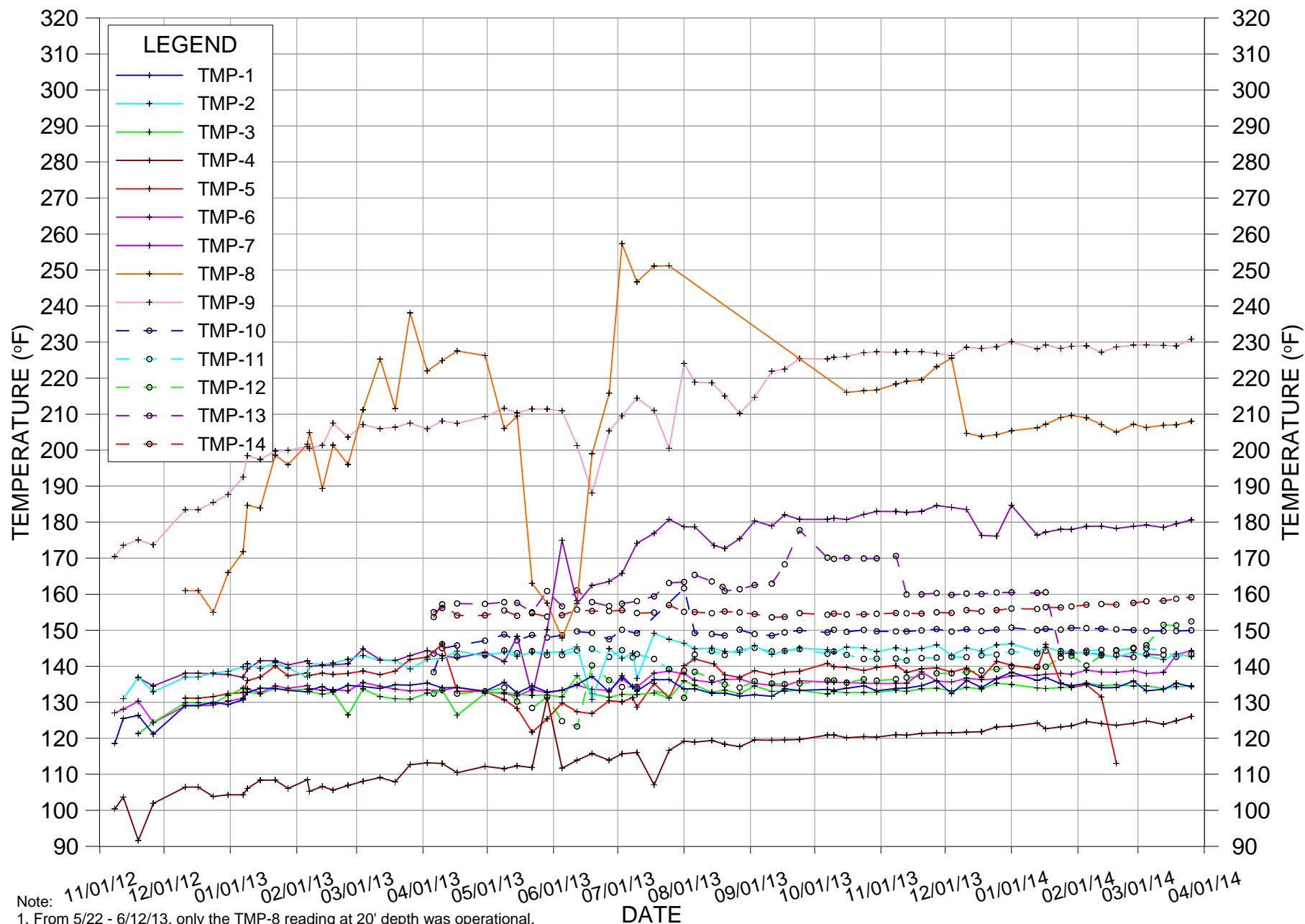
MAXIMUM TEMPERATURES



- Note: 11/01/12 12/01/12 01/01/13 02/01/13 03/01/13 04/01/13 05/01/13 06/01/13 07/01/13 08/01/13 09/01/13 10/01/13 11/01/13 12/01/13 01/01/14 02/01/14 03/01/14 04/01/14
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 from 8/1 to 10/10/2013. Valid readings from 20' to 40' resumed on 10/16/2013.
 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

AVERAGE TEMPERATURES



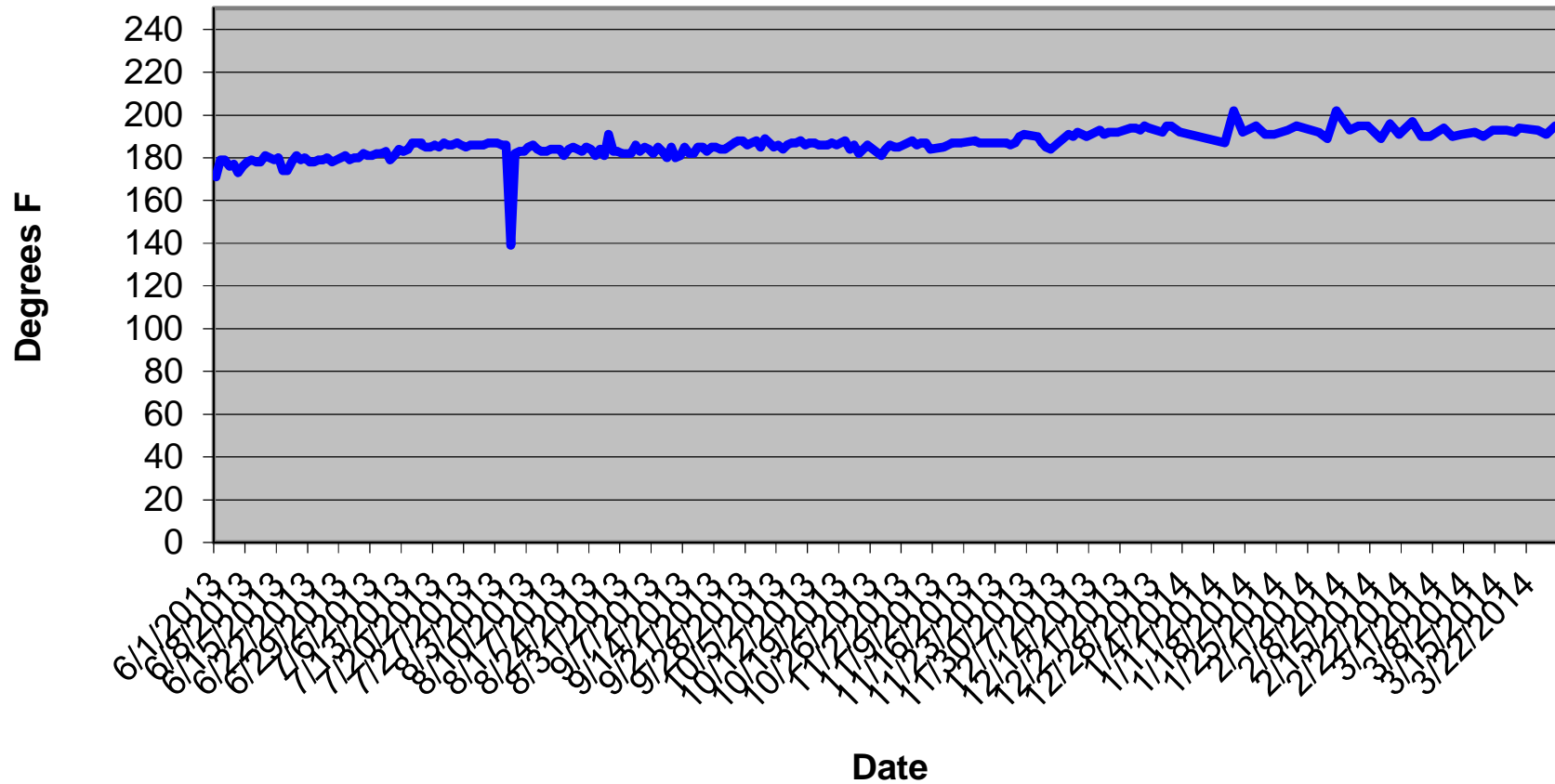
- Note:
- From 5/22 - 6/12/13, only the TMP-8 reading at 20' depth was operational.
No valid readings were obtained for TMP-8 from 8/1 to 10/10/2013. Valid readings from 20' to 40' resumed on 10/16/2013.
 - A new OMEGA dial was installed at TMP-7R on 6/12/2013 enabling more valid readings.
 - No valid readings were obtained for TMP-10 and TMP-12 on 7/18/2013 or 7/25/2013.
 - 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

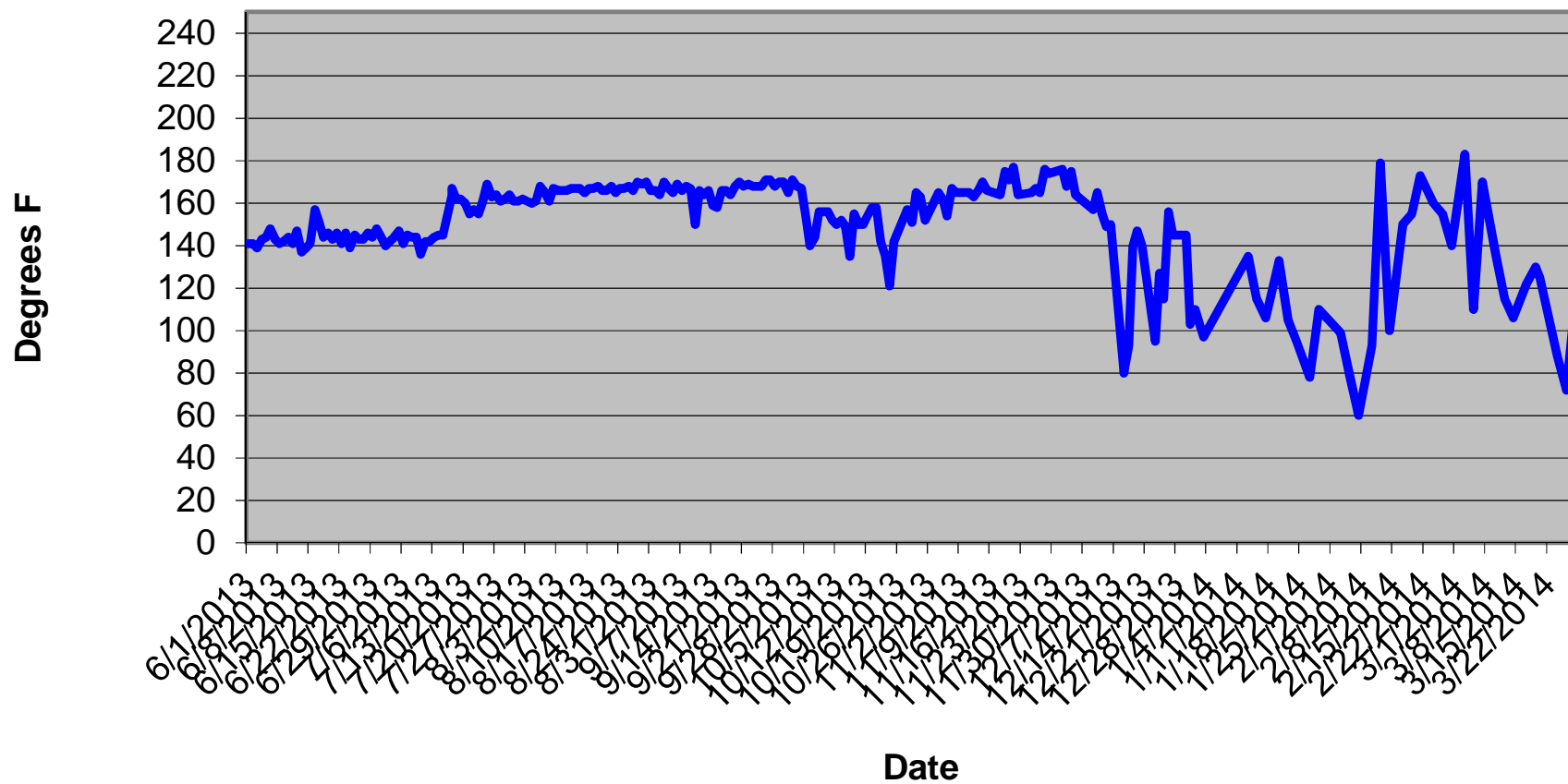
GAS INTERCEPTOR WELLHEAD TEMPERATURE GRAPHS

GIW-1 Wellhead Temperatures



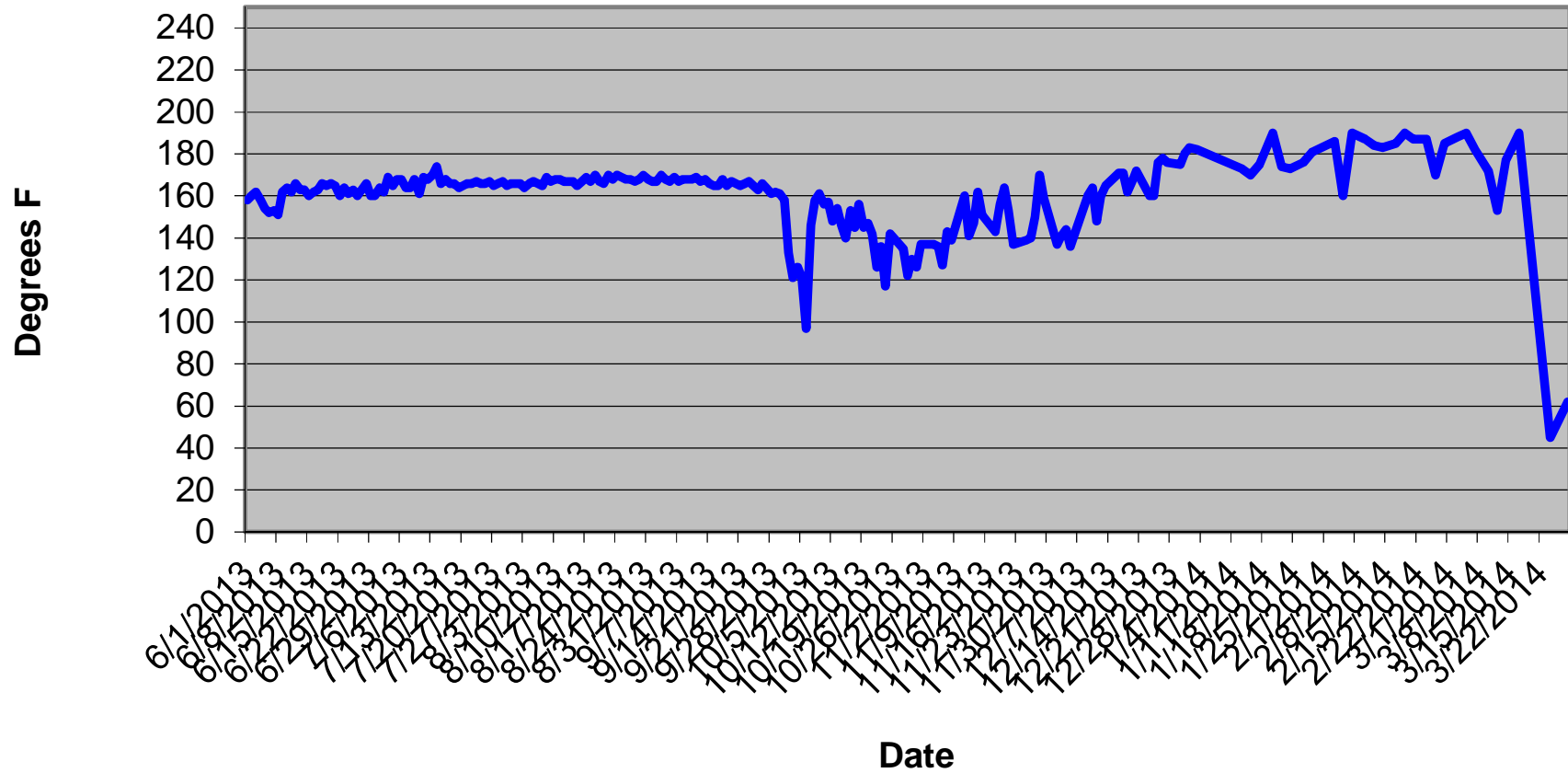
Wellhead Temp. (F)

GIW-2 Wellhead Temperatures



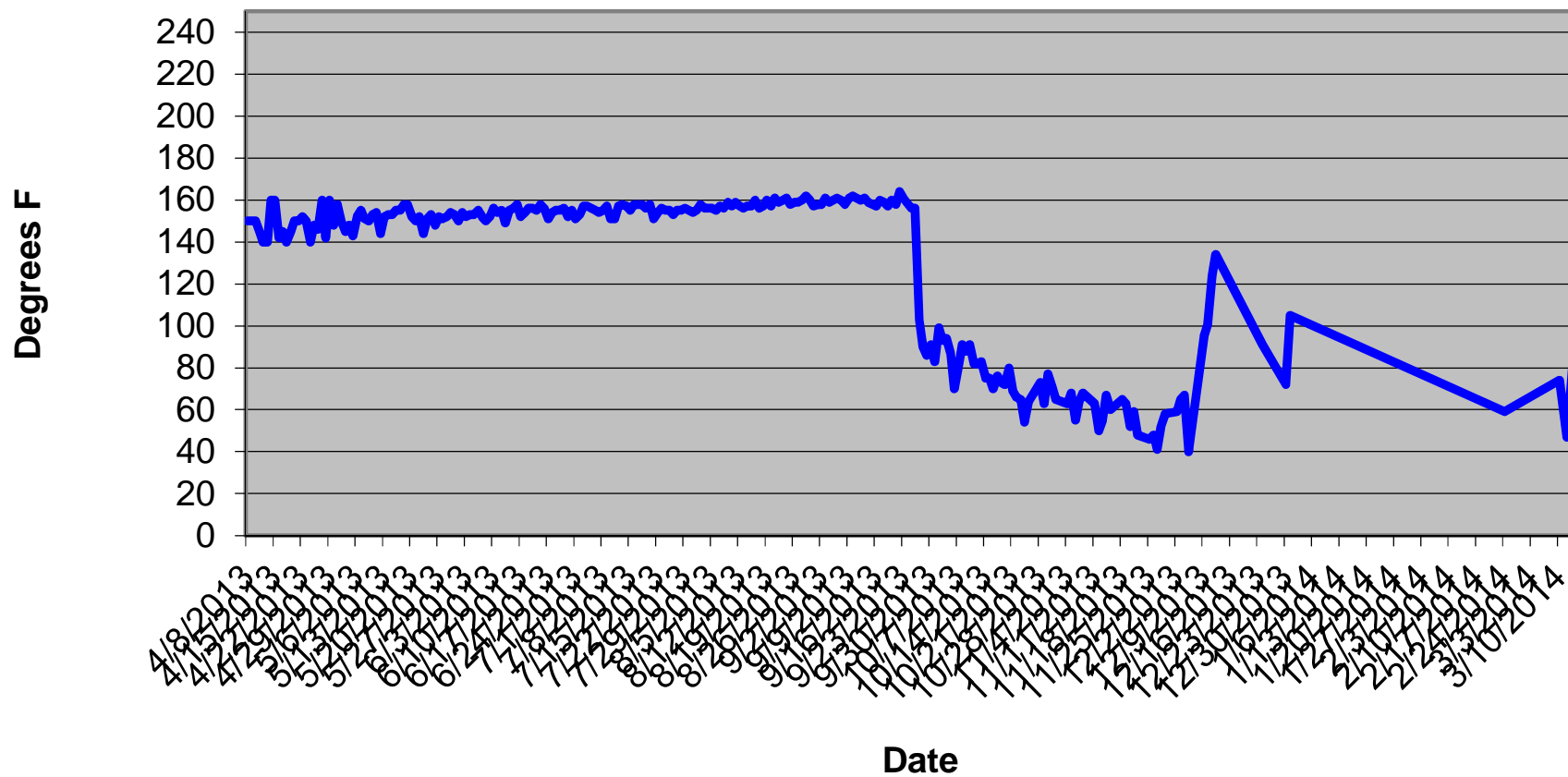
Wellhead Temp (F)

GIW-3 Wellhead Temperatures



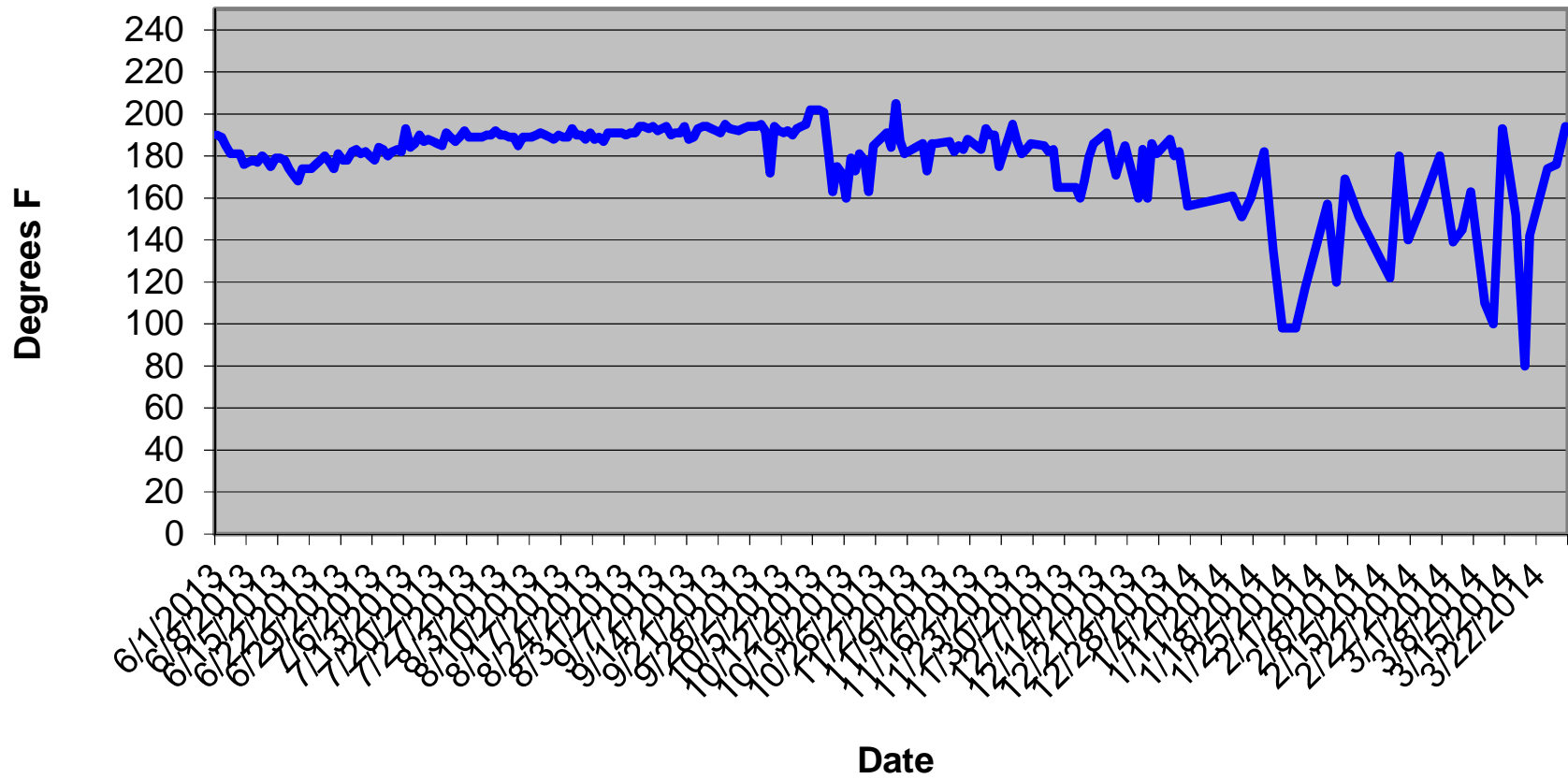
Wellhead Temp. (F)

GIW-4 Wellhead Temperatures



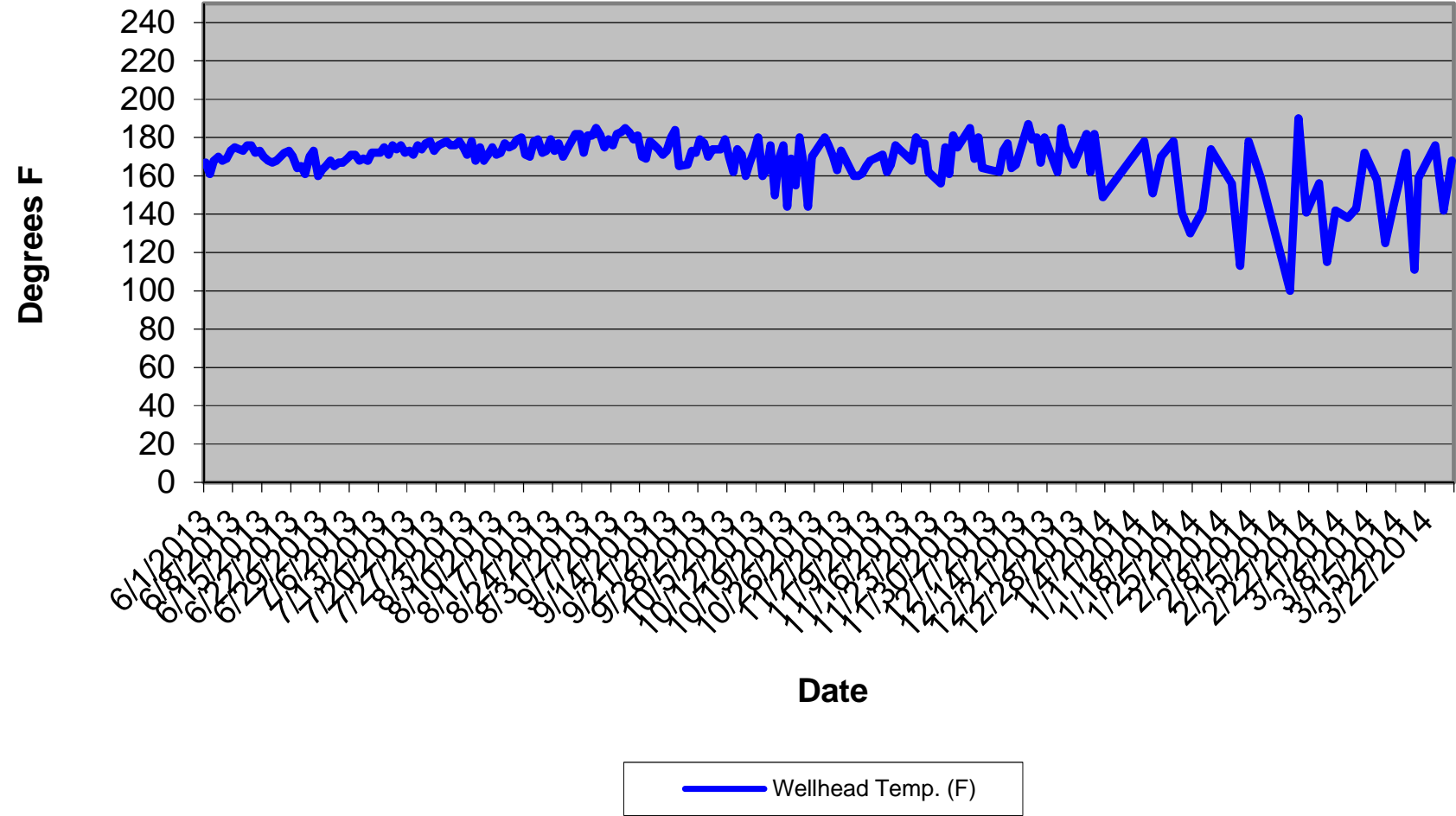
Wellhead Temp. (F)

GIW-5 Wellhead Temperatures

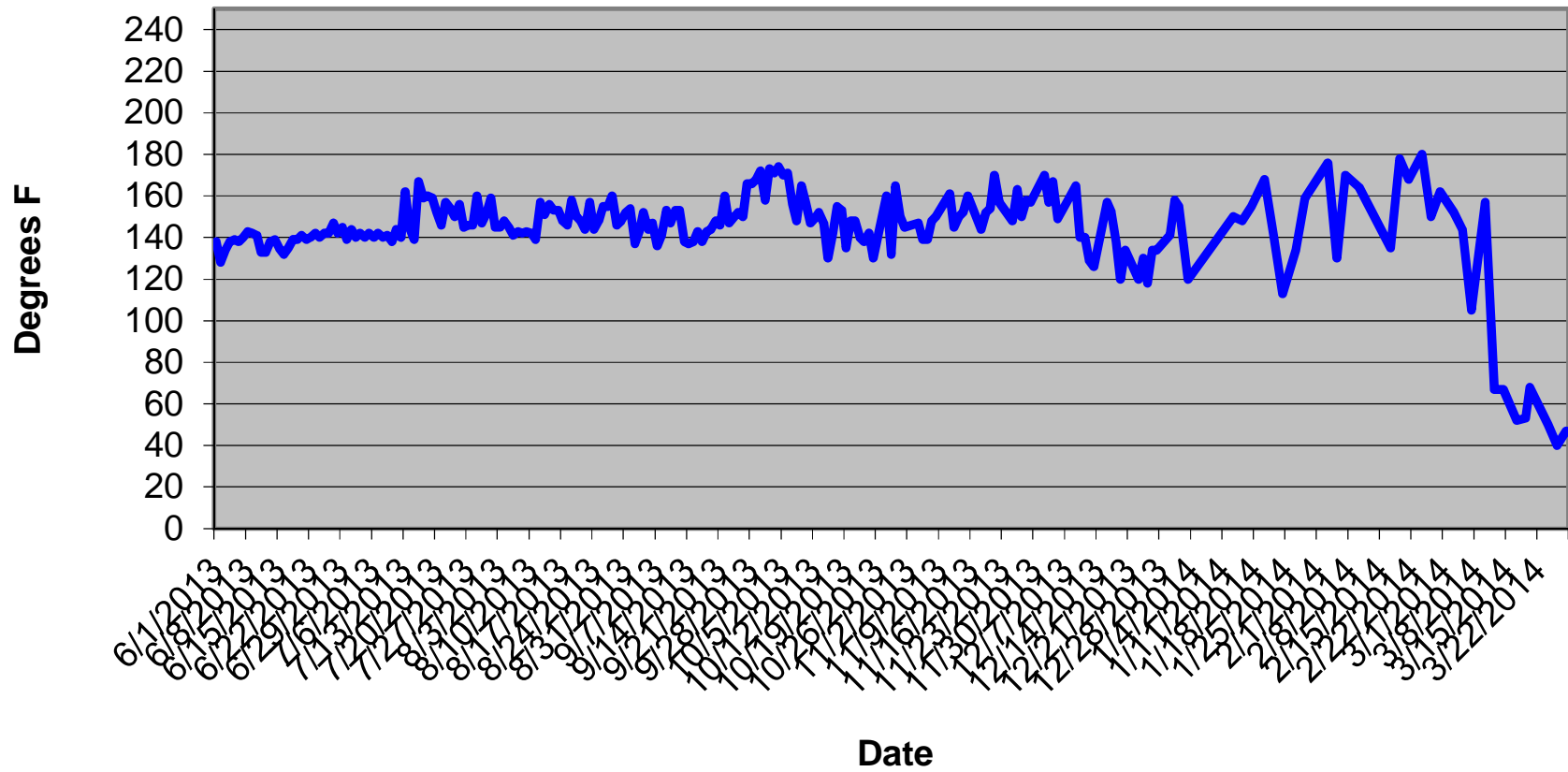


Wellhead Temp. (F)

GIW-6 Wellhead Temperatures

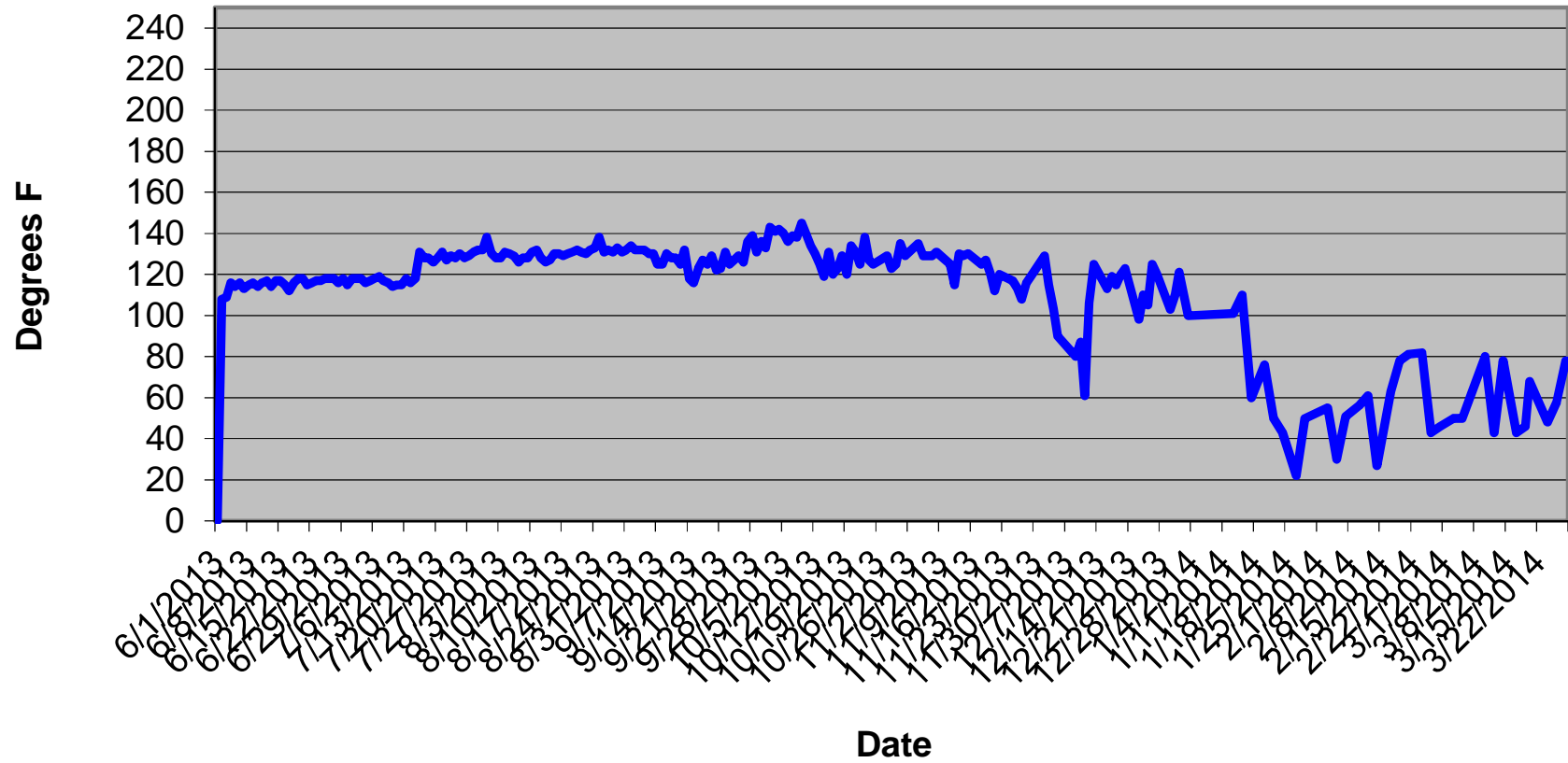


GIW-7 Wellhead Temperatures



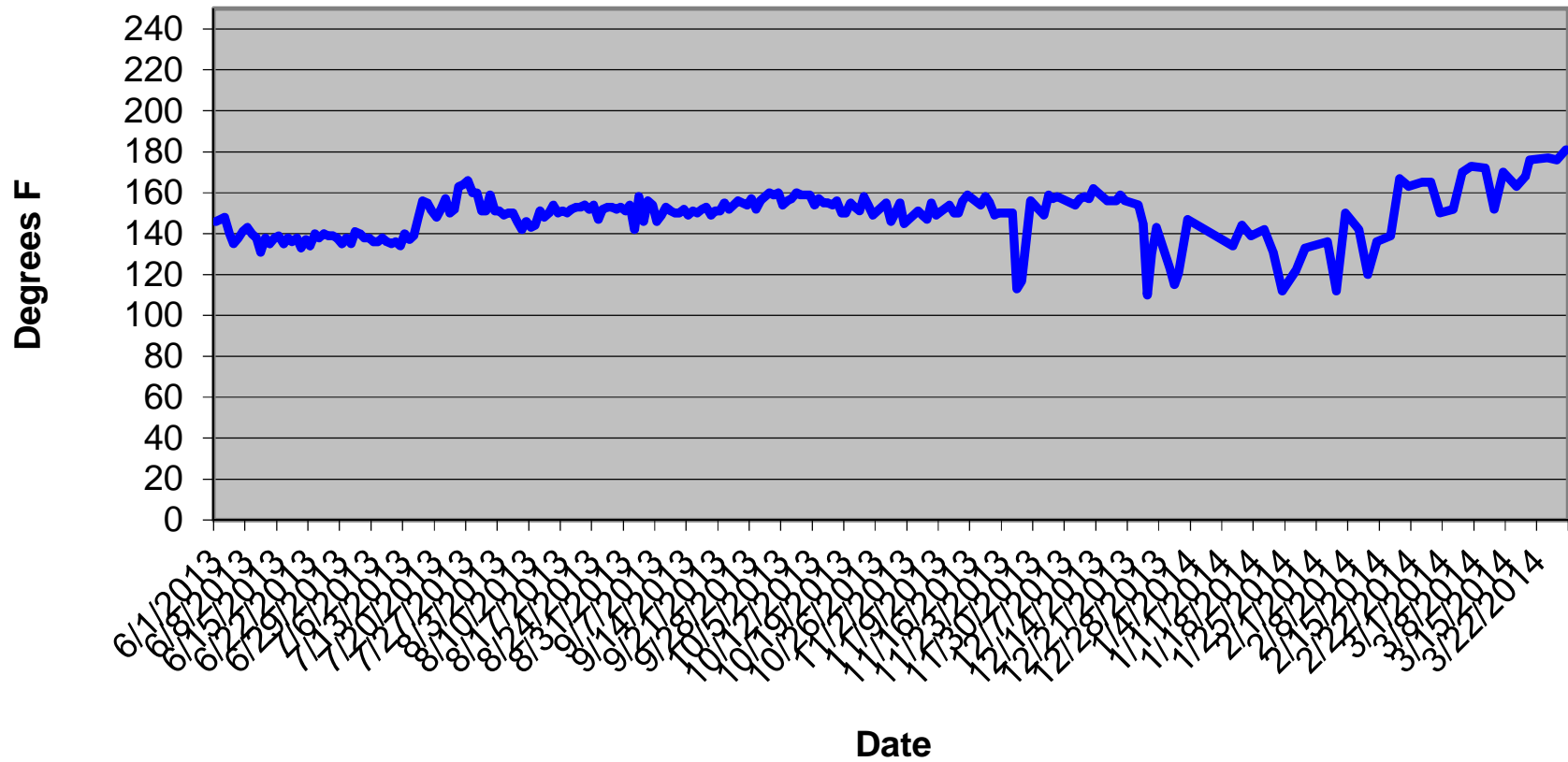
Wellhead Temp. (F)

GIW-8 Wellhead Temperatures



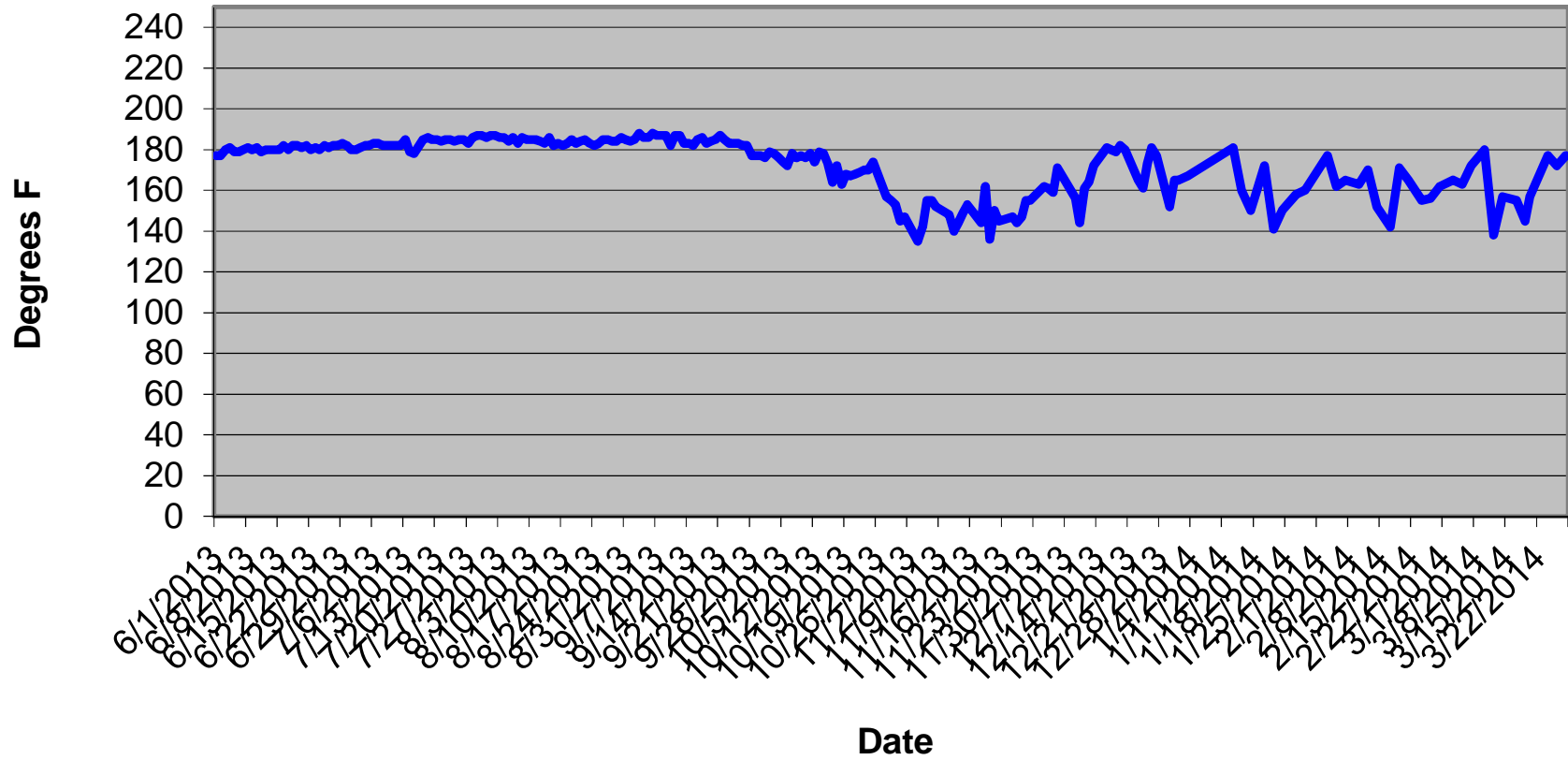
Wellhead Temp. (F)

GIW-9 Wellhead Temperatures



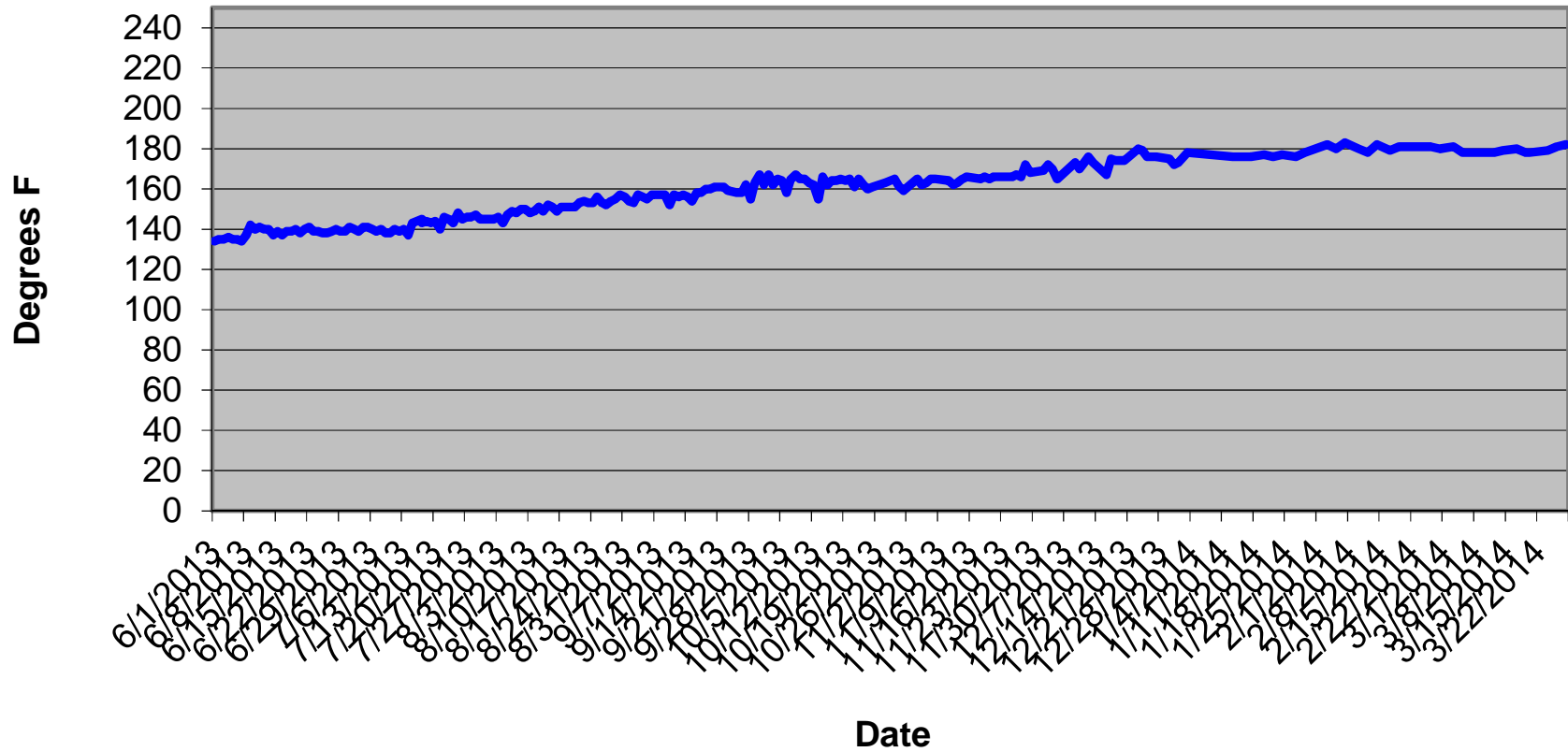
Wellhead Temp. (F)

GIW-10 Wellhead Temperatures



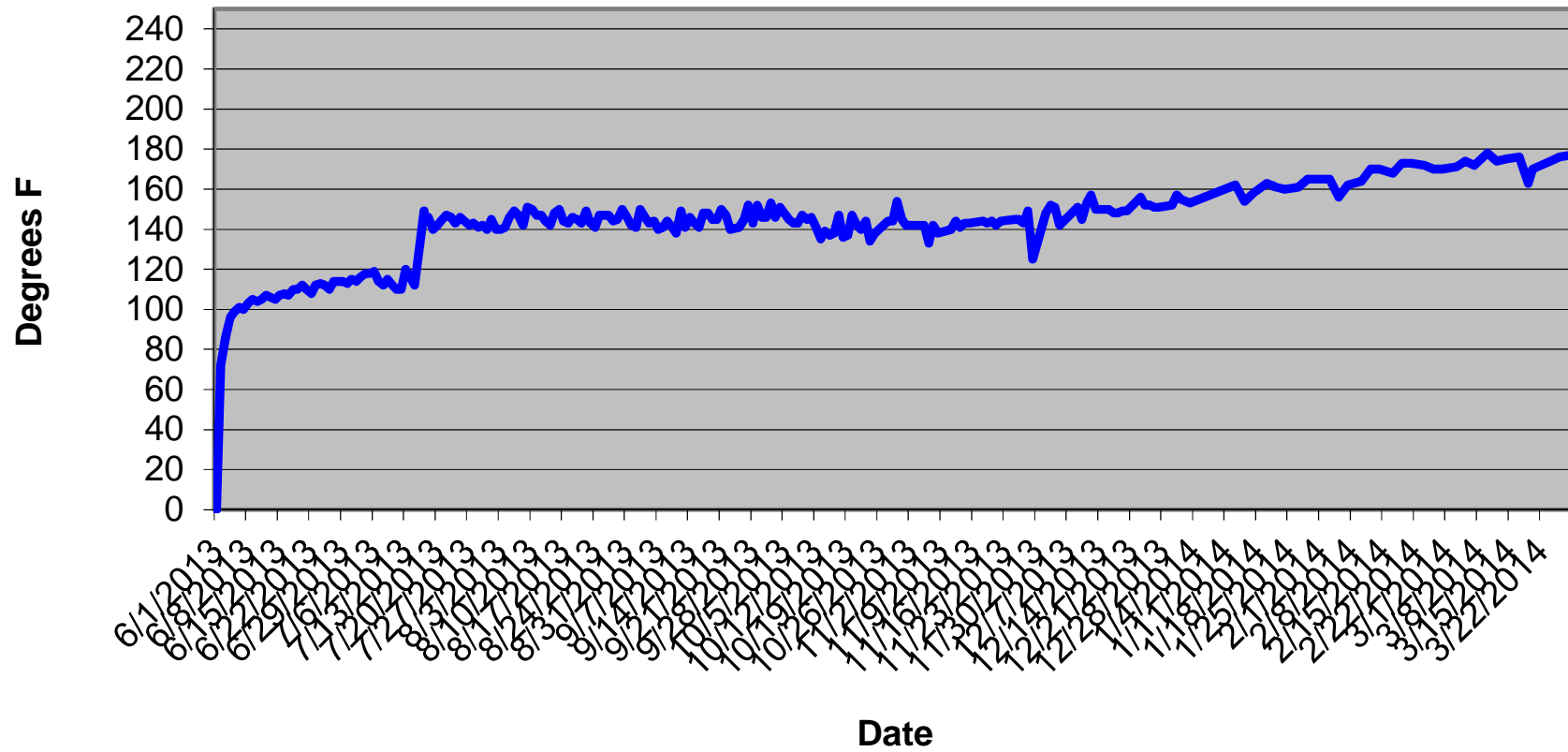
Wellhead Temp. (F)

GIW-11 Wellhead Temperatures



Wellhead Temp. (F)

GIW-12 Wellhead Temperatures



Wellhead Temp. (F)

GIW-13 Wellhead Temperatures

