

Bridgeton Landfill, LLC

Weekly Data Submittals

Week of November 9 - November 15, 2014

**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 – Neck-Area Gas Extraction 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**
- Neck-Area Gas Extraction Well Data Excel Spreadsheet**

November 21, 2014

Commentary on Data

Attachment A – Leachate Levels in Leachate Collection Sumps

Leachate Collection Sump (LCS)-1D, -5A, and -6B were partially or fully operational during the weekly reporting period. LCS-1D, while operational at the time of inspection, has a broken transducer.

The pump in LCS-2D was off during the weekly monitoring event due to an “over current” error.

The transducer melted in LCS-3D in March 2014 and is currently non-operational.

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. Options for pumping from this location are currently under review.

Attachment B - Temperature Monitoring Probe Analytical Charts

The following TMPs indicated generally consistent profiles to previous observations: TMP-1, -2, -3, -4, -6, -8, -9, -10, -11, -12, -14, -16, -17, and -18.

TMP-5, -7, -7R, -13, and -15 have been removed from the presentation based on unreliable thermocouple measurements or other documented issues.

Attachment C - Gas Interceptor Wellhead Temperature Graphs

There are currently water circulation cooling loops installed in seven Gas Interceptor Wells (GIW) (GIW-2 through GIW-7, as well as GIW-10). Wellhead gas temperatures in these wells are all in the low to mid 40°F range.

For the remaining six wells without a cooling system installed (GIW-1, -8, -9, -11, -12, and -13), with the exception of GIW-11, temperatures were generally consistent over the past week as well as compared to prior weeks. GIW-11 has been experiencing 20-30 degree fluctuations in gas temperature, which is likely due to its proximity to GIW series wells with cooling loops installed.

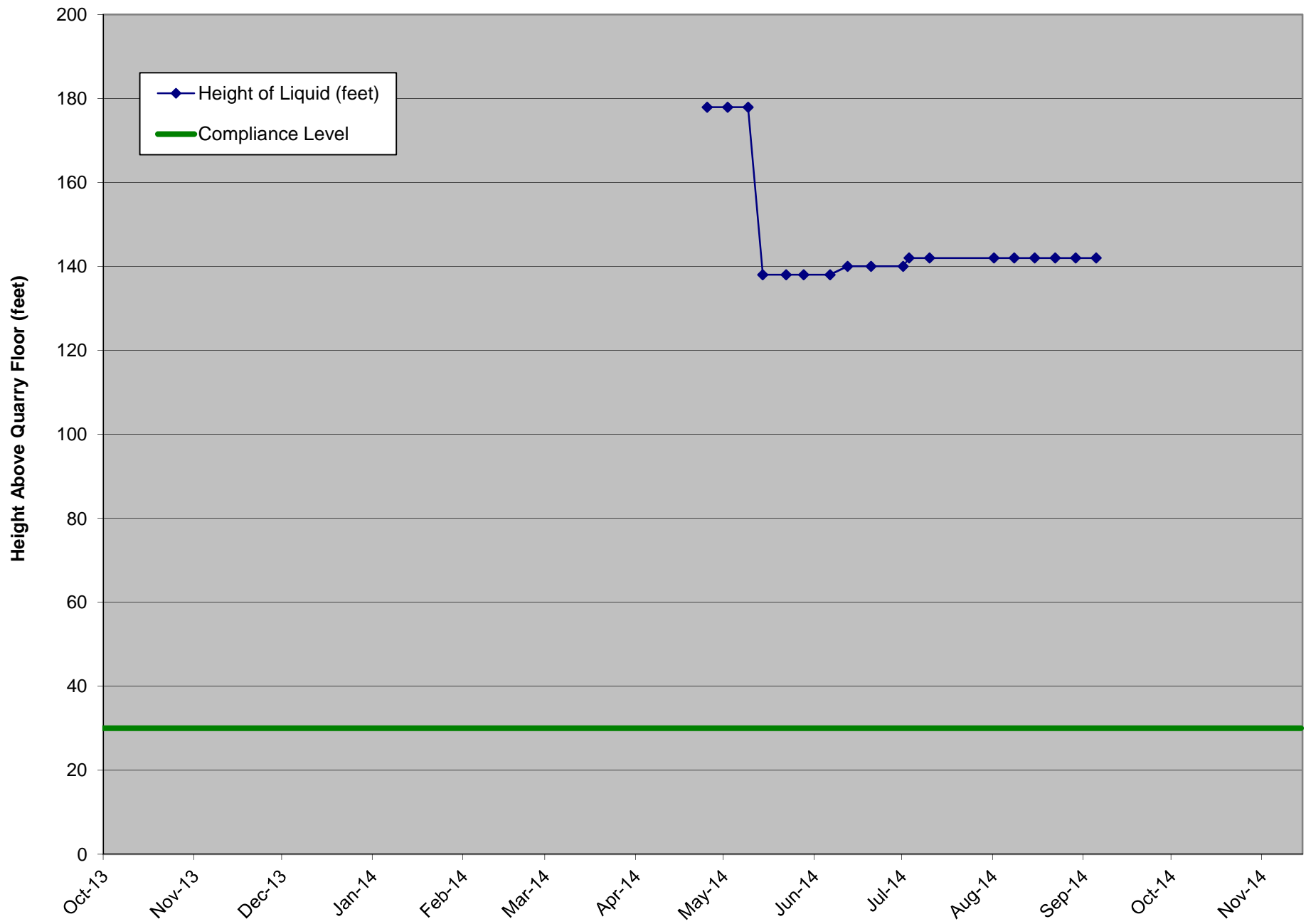
Attachment D – Neck Area Gas Extraction Well Data

Per request of MDNR, weekly gas temperature data is being collected for select gas extraction wells (GEWs) located in the neck area of the landfill. These wells include GEW-08, -09, -10, -38, -39, -40, -41R, -43R, -53, -54, -55, -56R, -109, and -110. Over the past week only GEW-08, -09, -53, and -55 were monitored, due to weather and scheduling issues. All four wells are showing a slight downward trend in temperature. The following week (i.e., the current reporting period), all 14 wells were monitored. The data from the current week (November 16-21) is included in this report's data set.

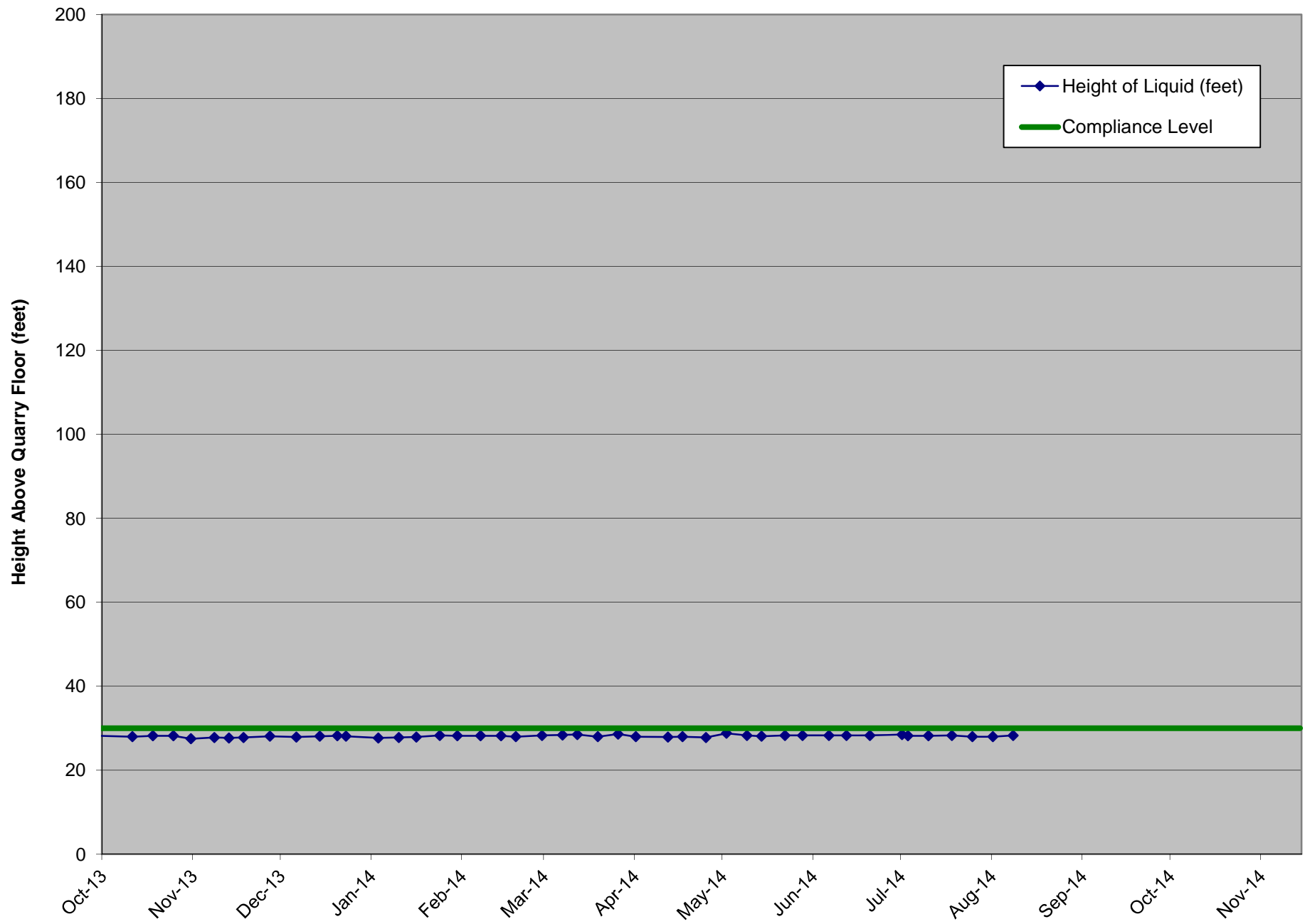
ATTACHMENT A

LEACHATE LEVELS IN LEACHATE COLLECTION SUMPS

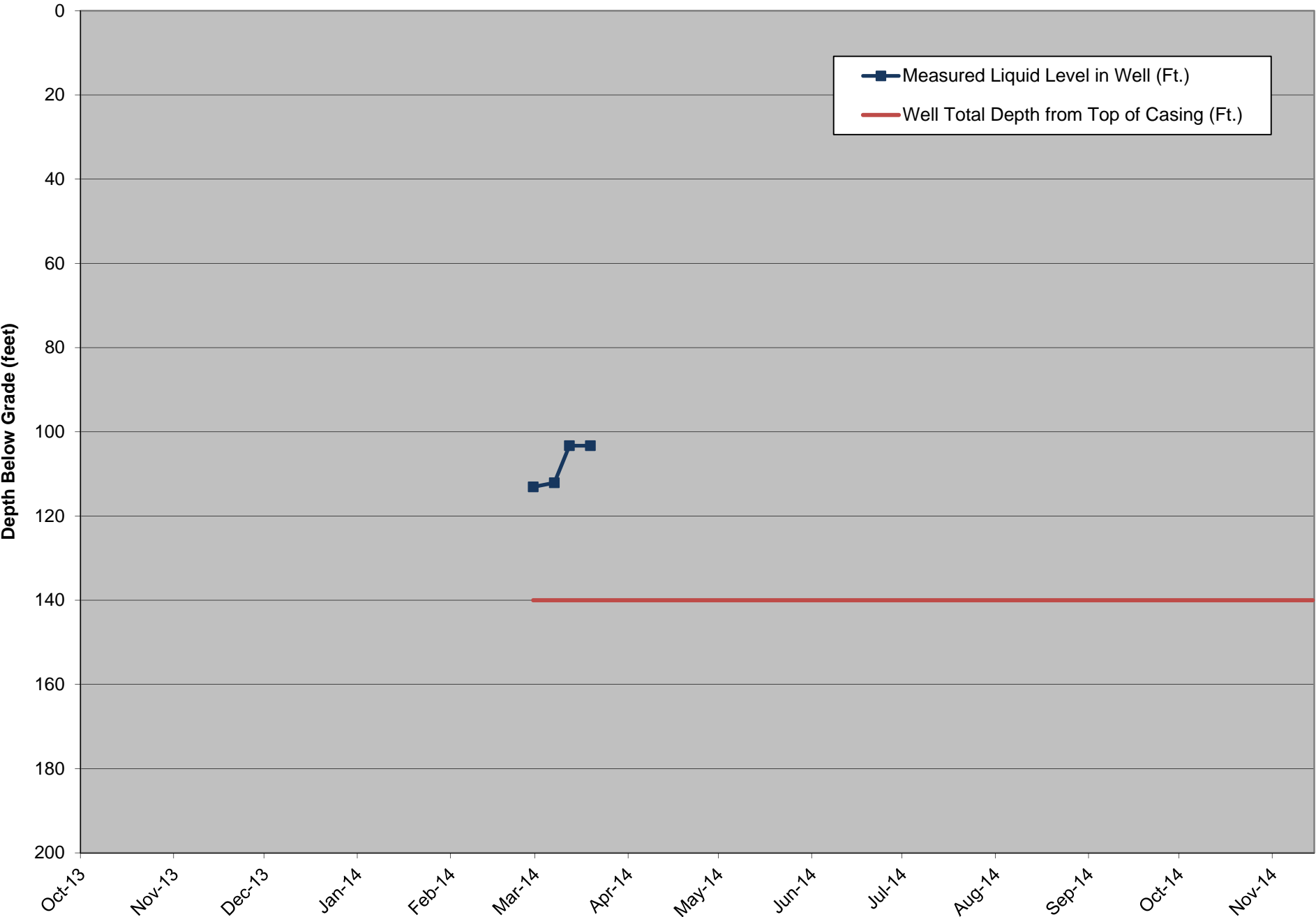
LCS-1D Liquid Level Above Quarry Floor



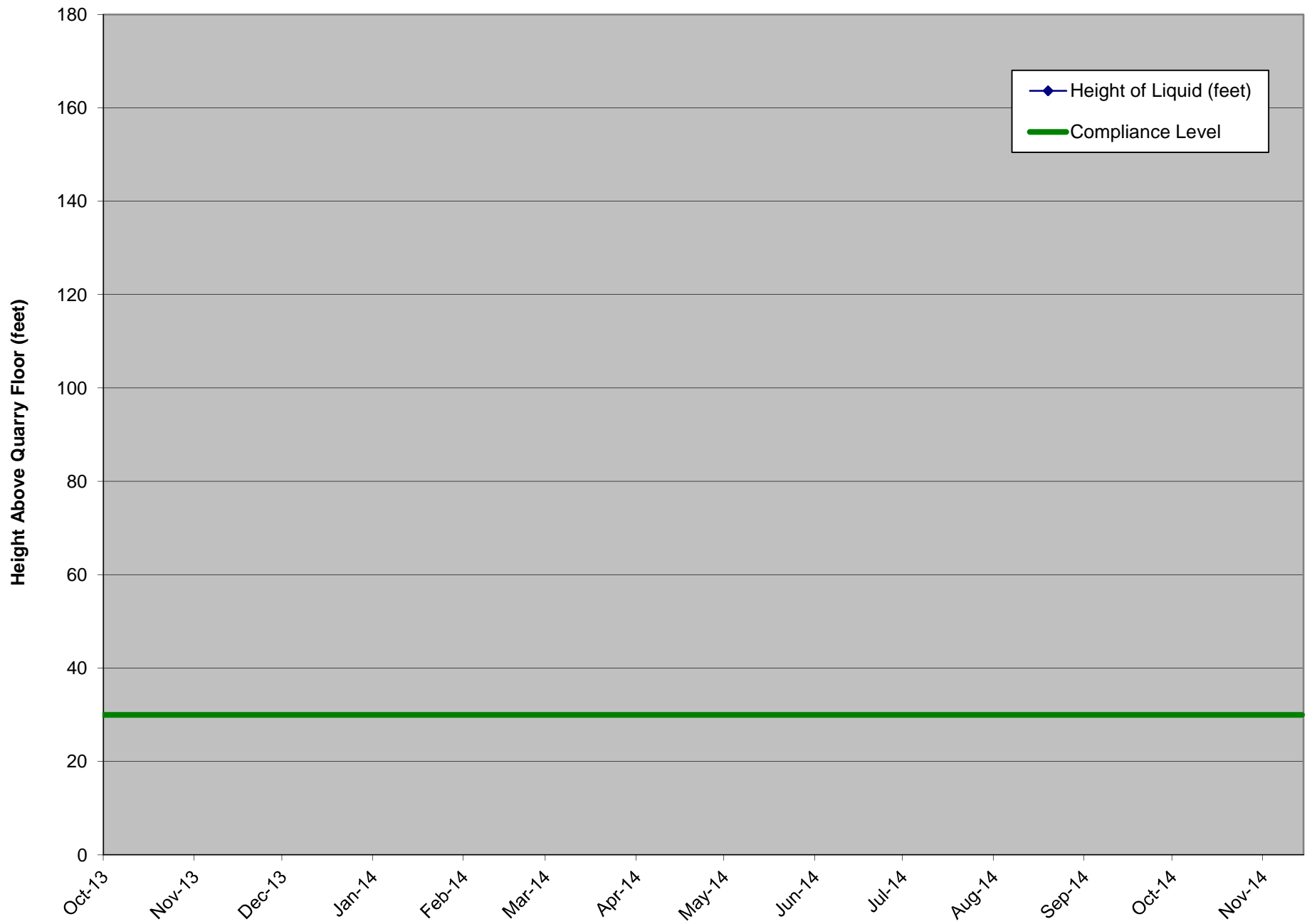
LCS-2D Liquid Level Above Quarry Floor



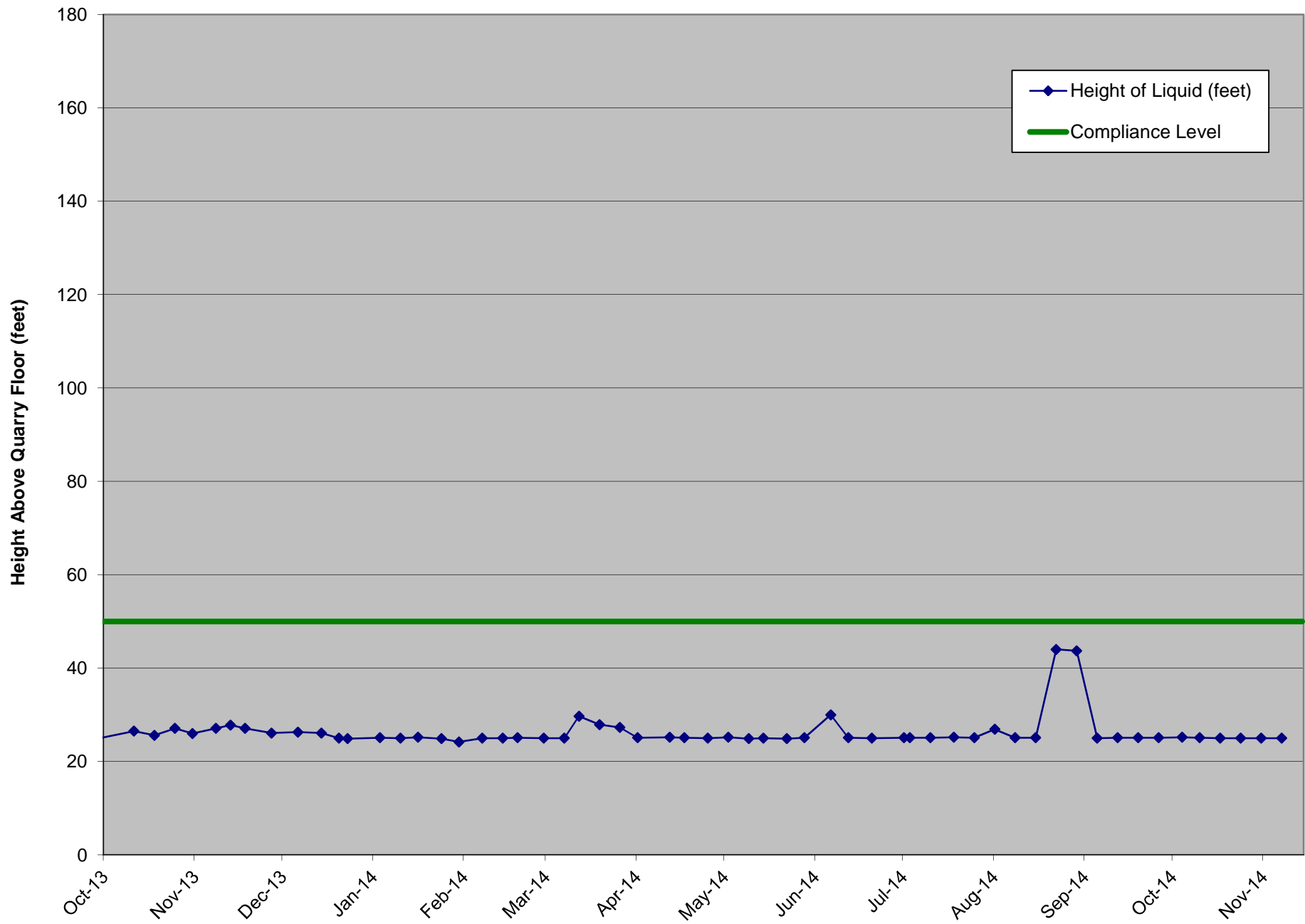
LCS-3D Liquid Level Below Ground Surface



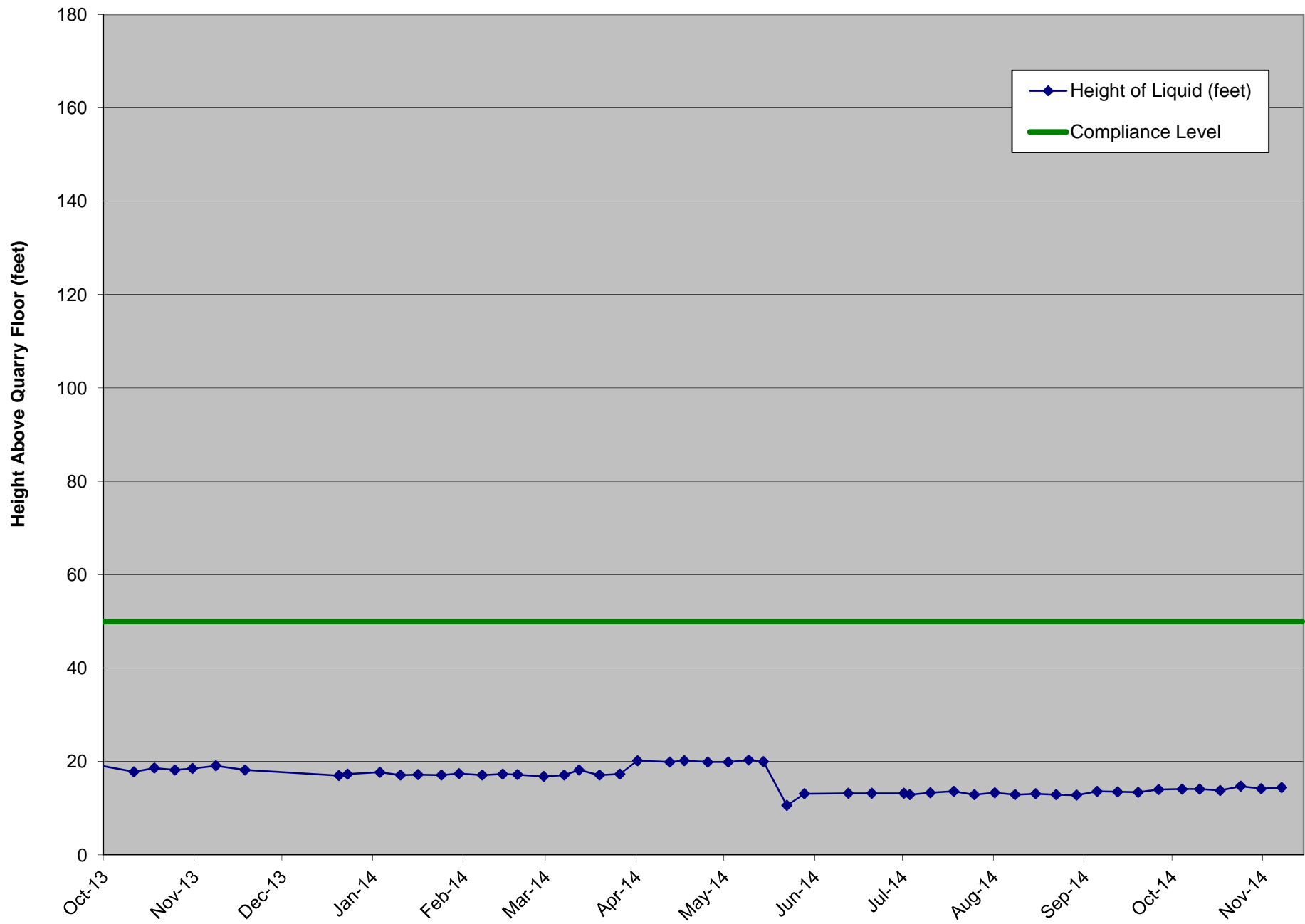
LCS-4B Liquid Level Above Quarry Floor



LCS-5A Liquid Level Above Quarry Floor



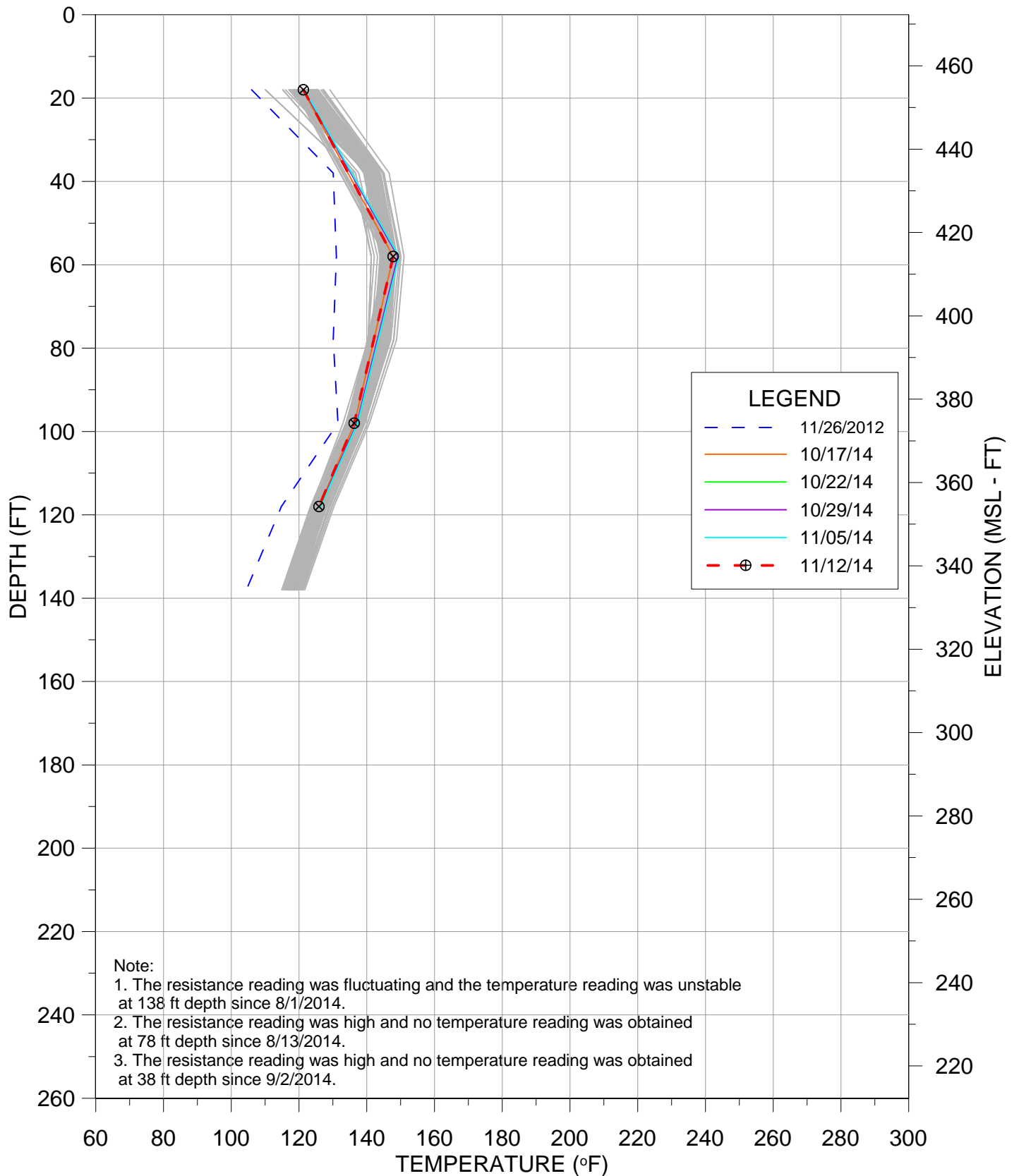
LCS-6B Liquid Level Above Quarry Floor



ATTACHMENT B

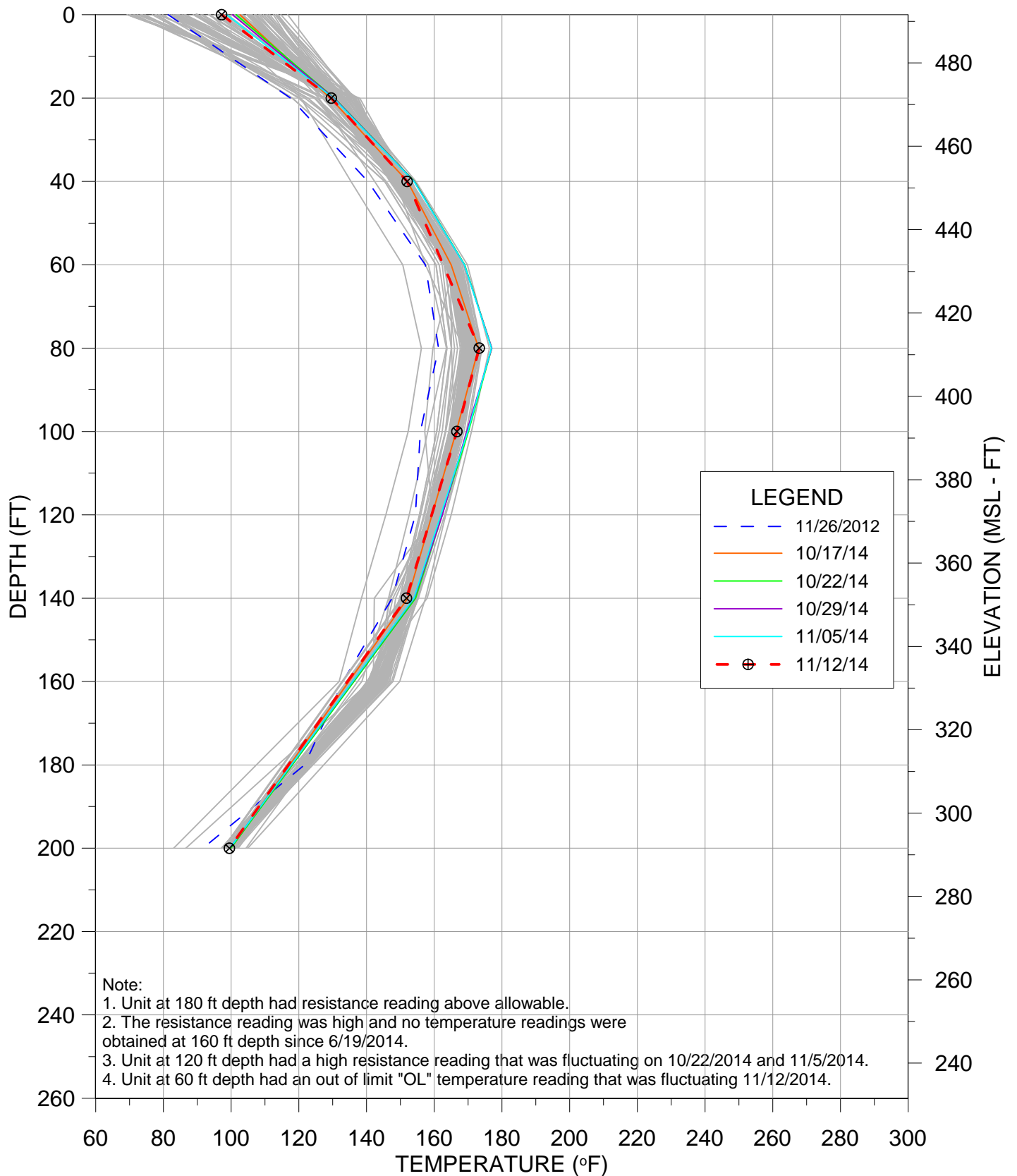
TEMPERATURE MONITORING PROBE ANALYTICAL CHARTS

TMP-1

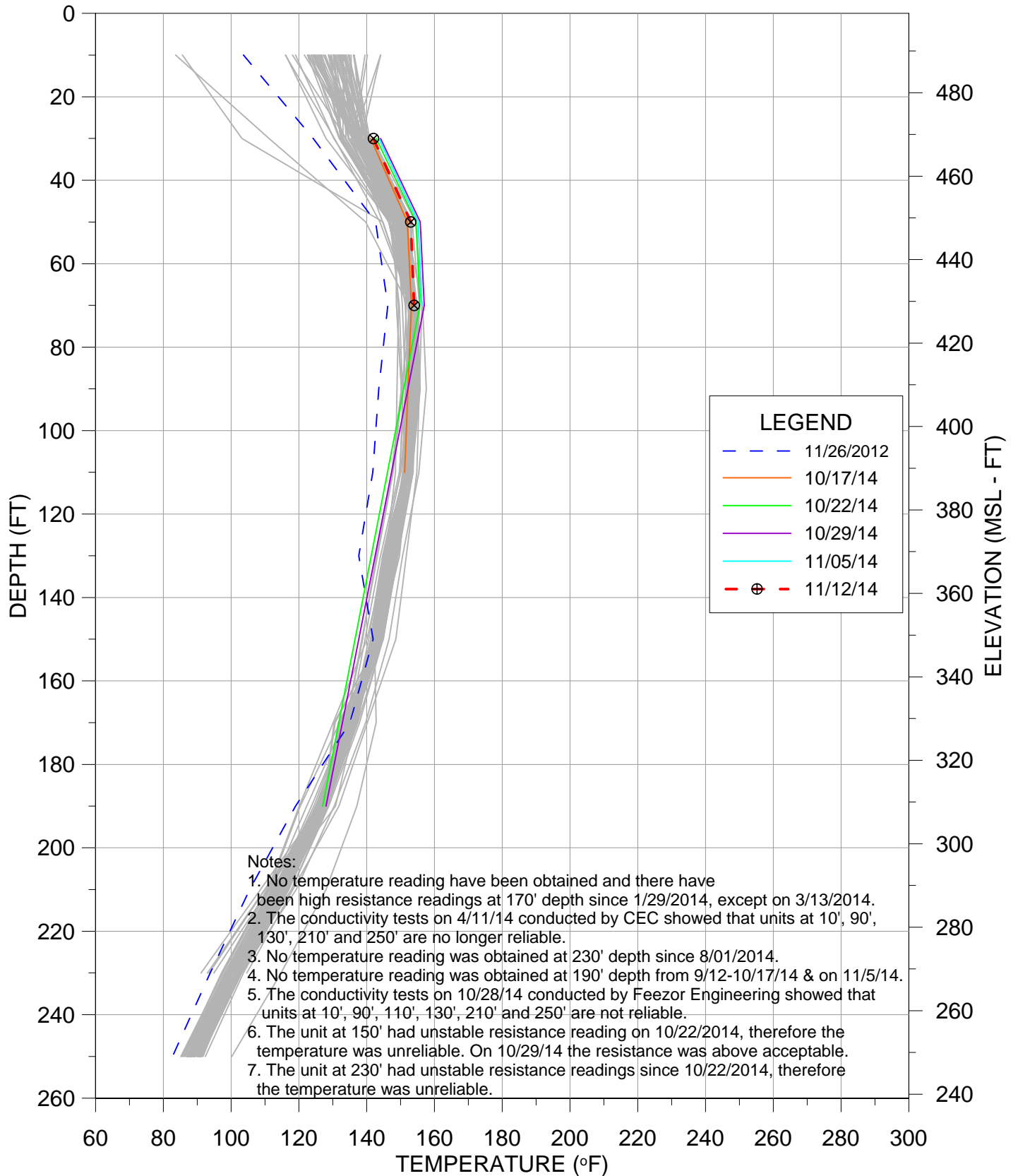


TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-2

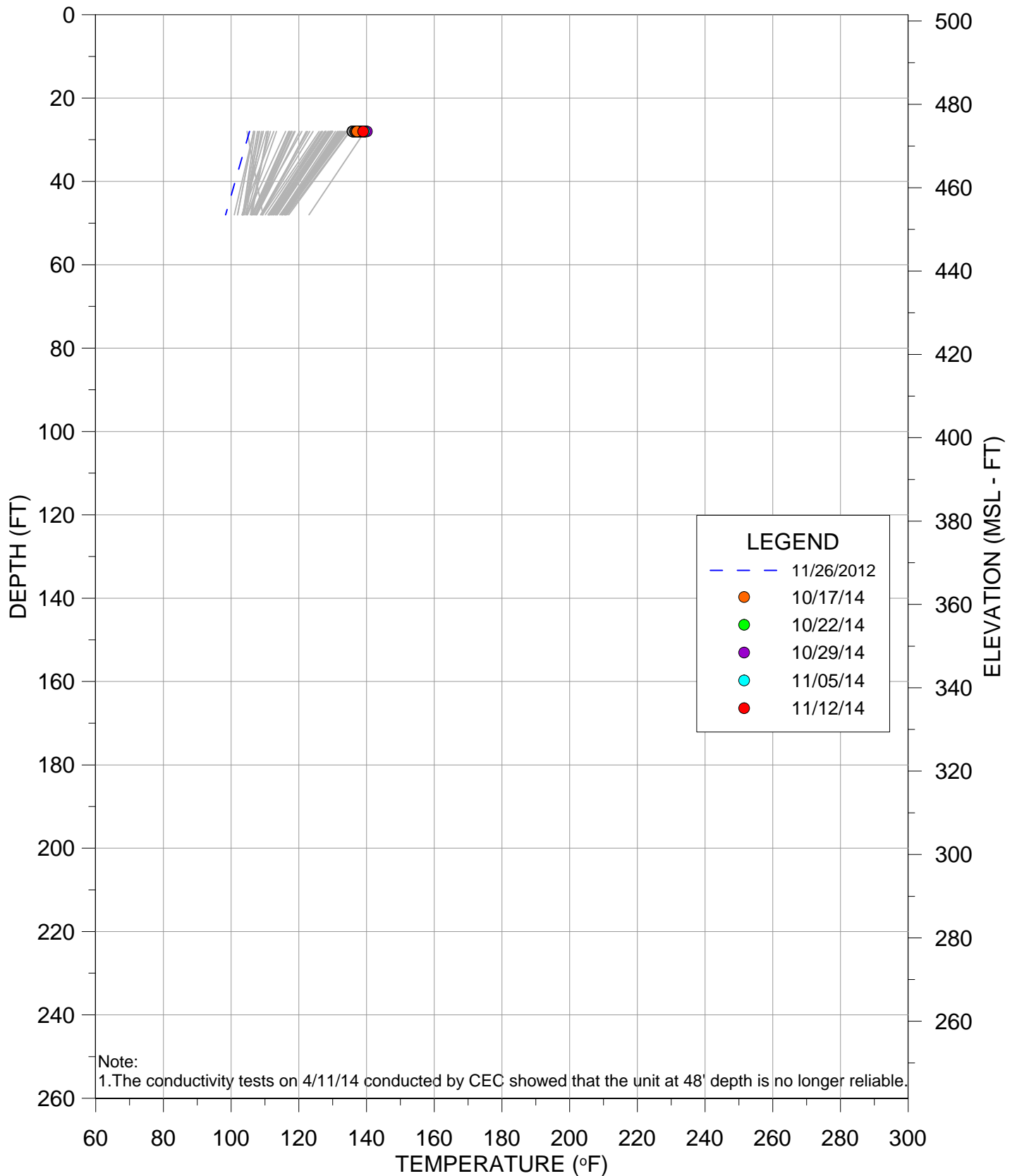


TMP-3



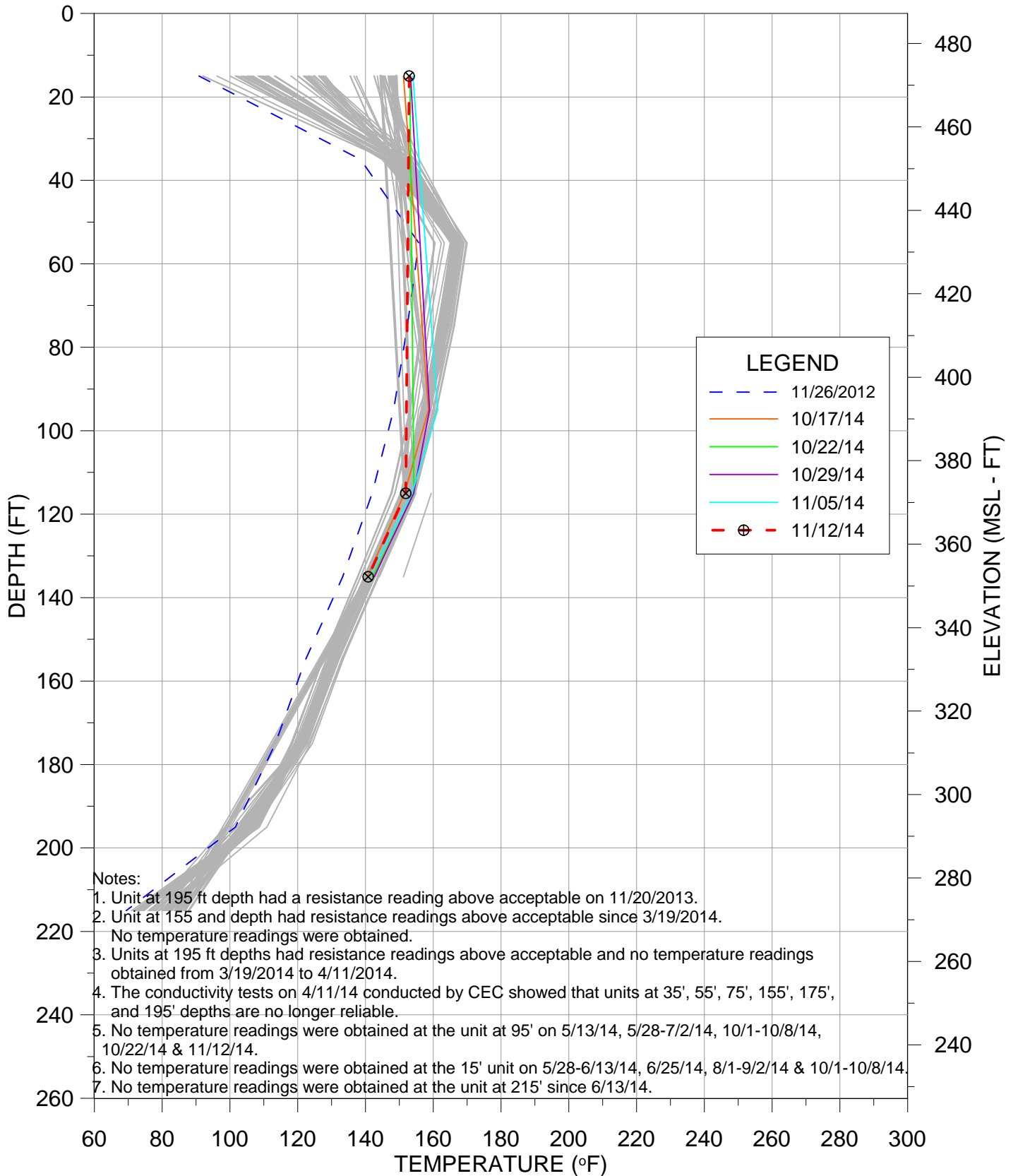
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-4



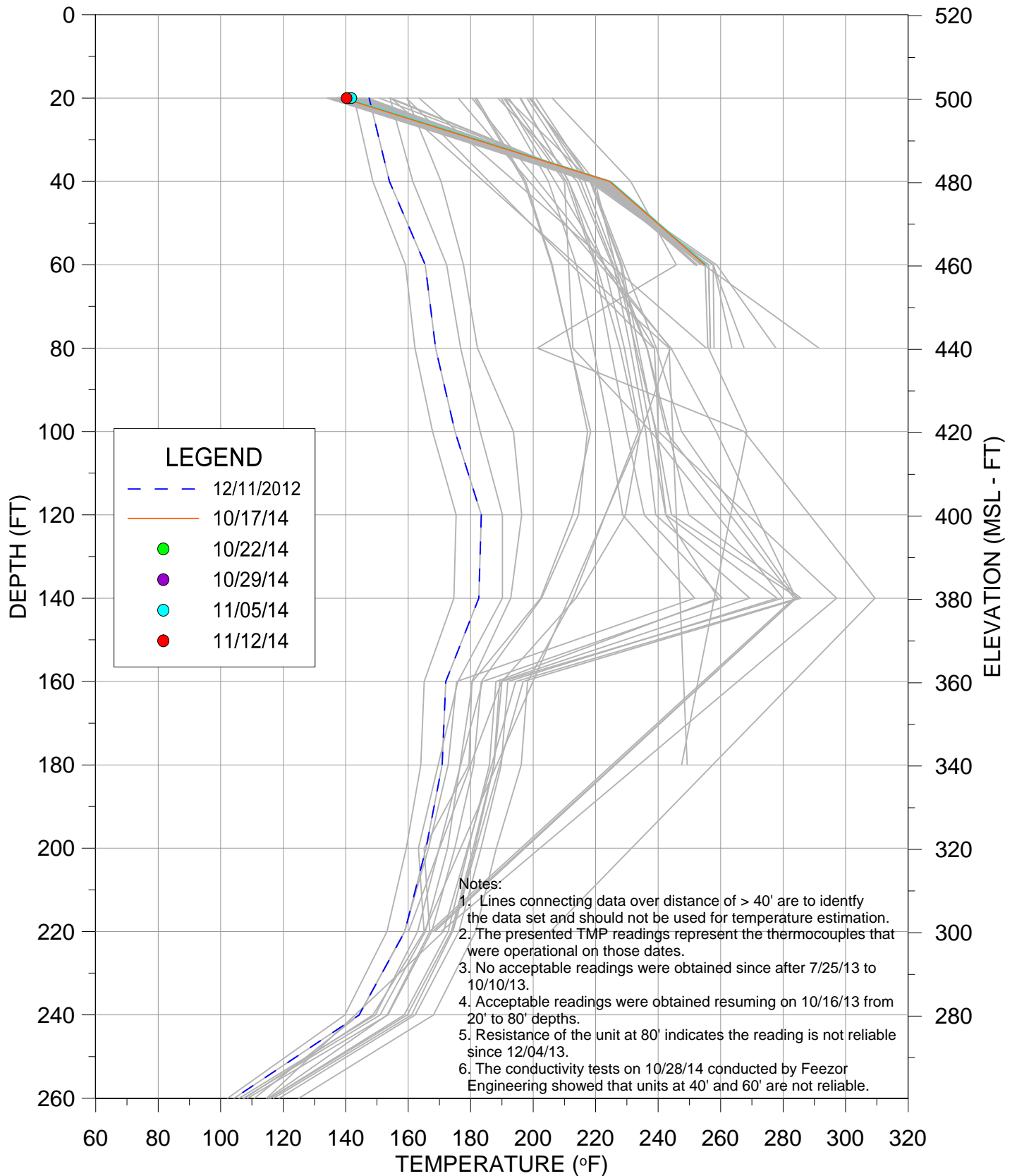
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-6



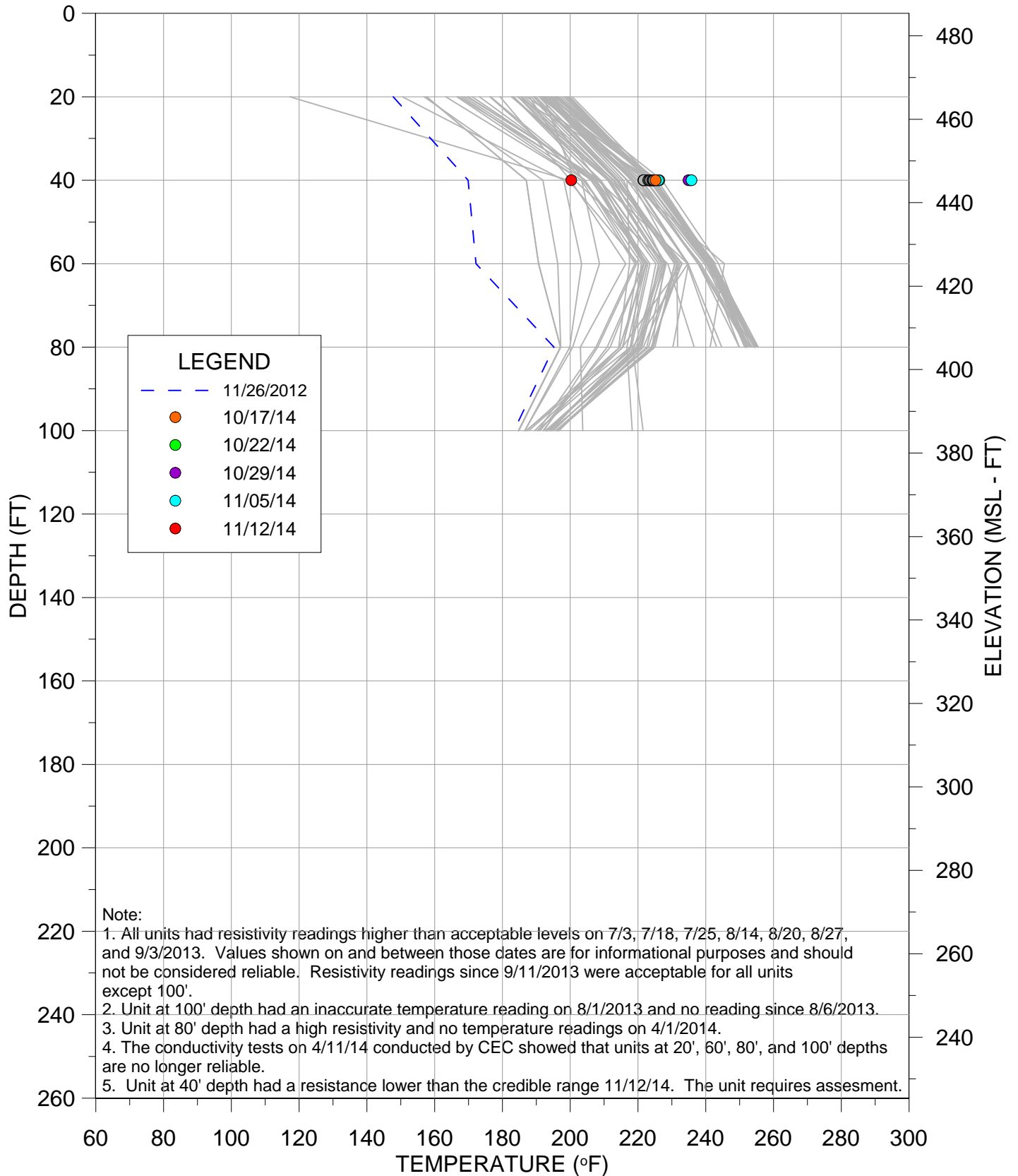
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-8

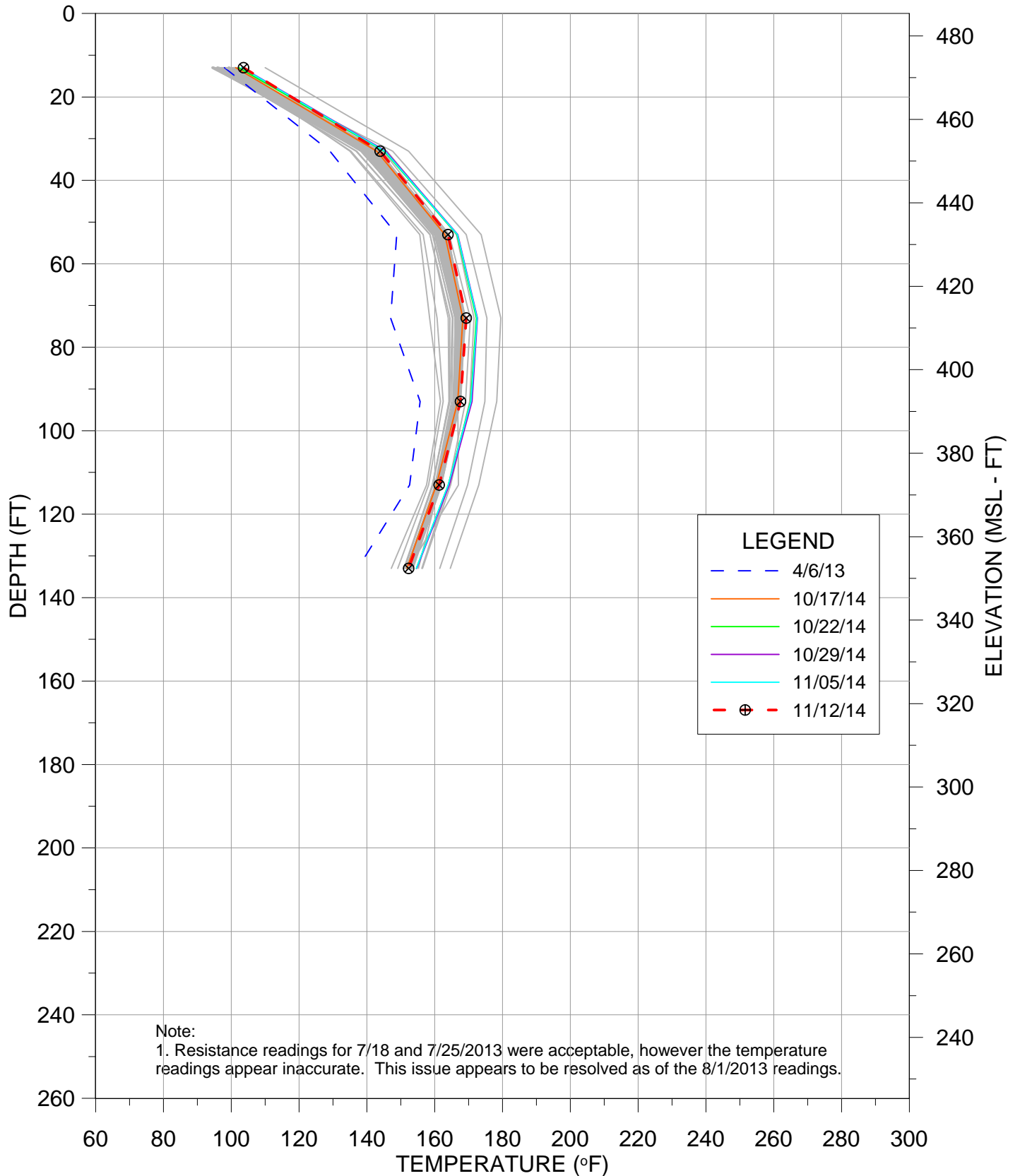


TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-9

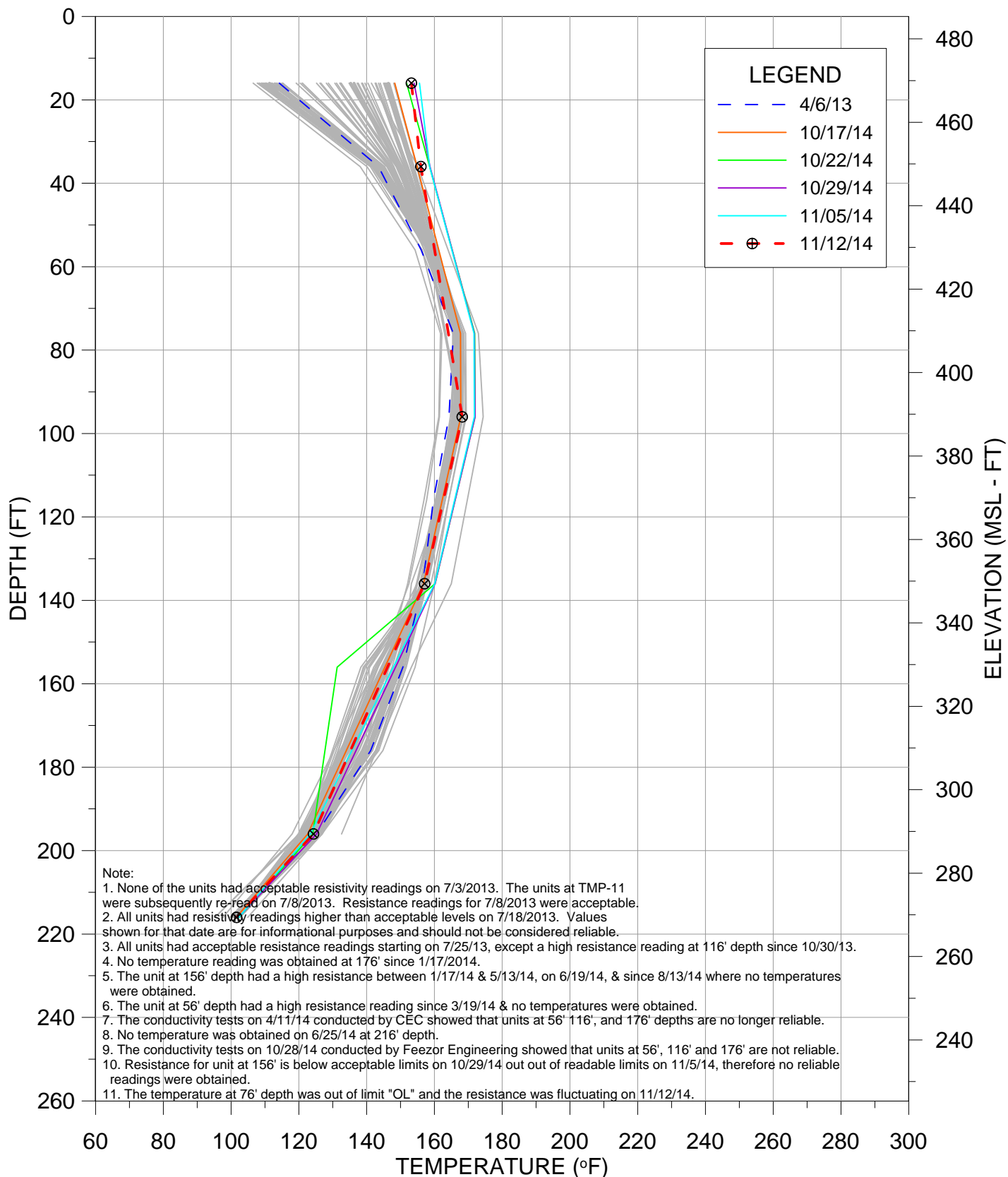


TMP-10



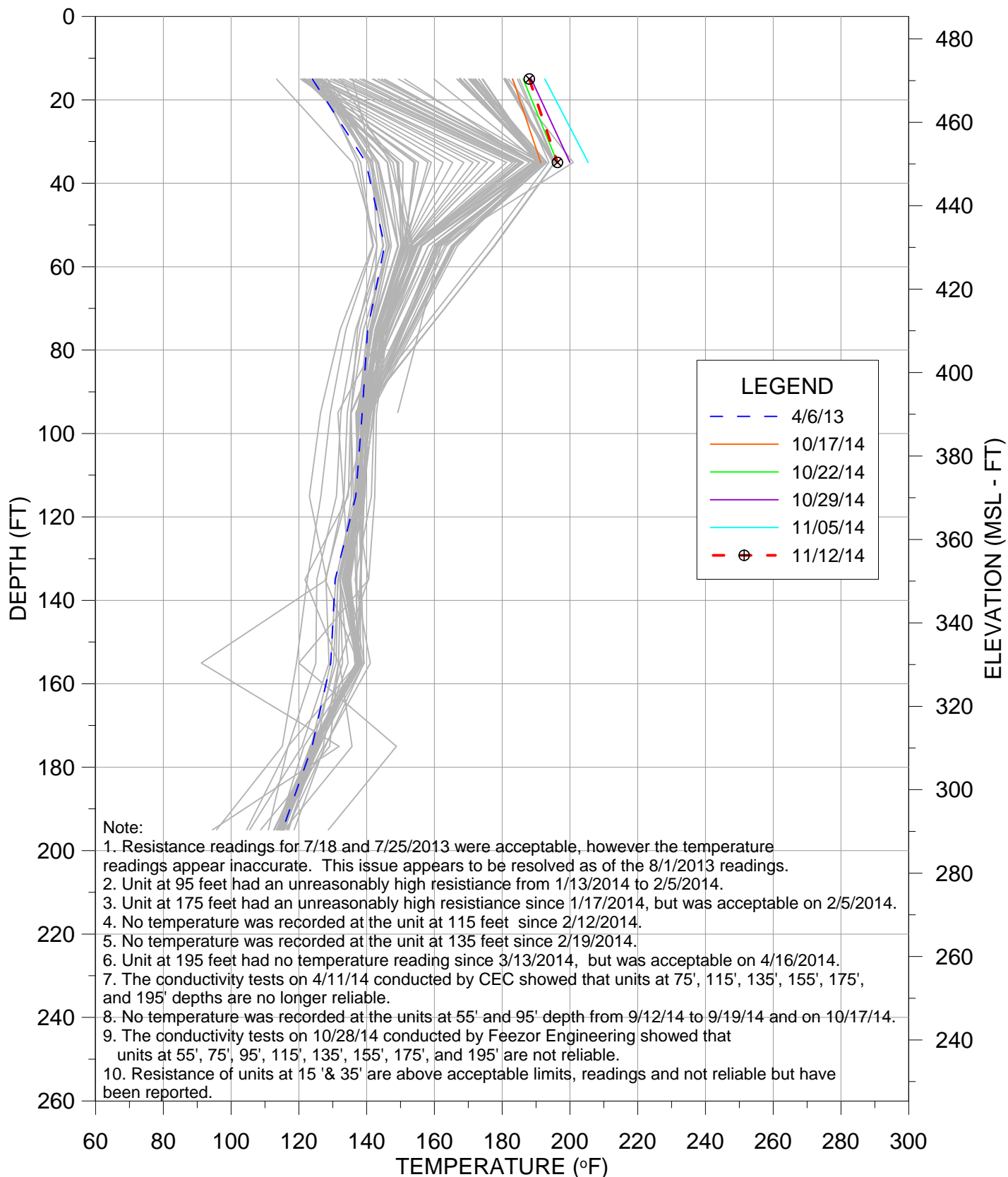
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-11

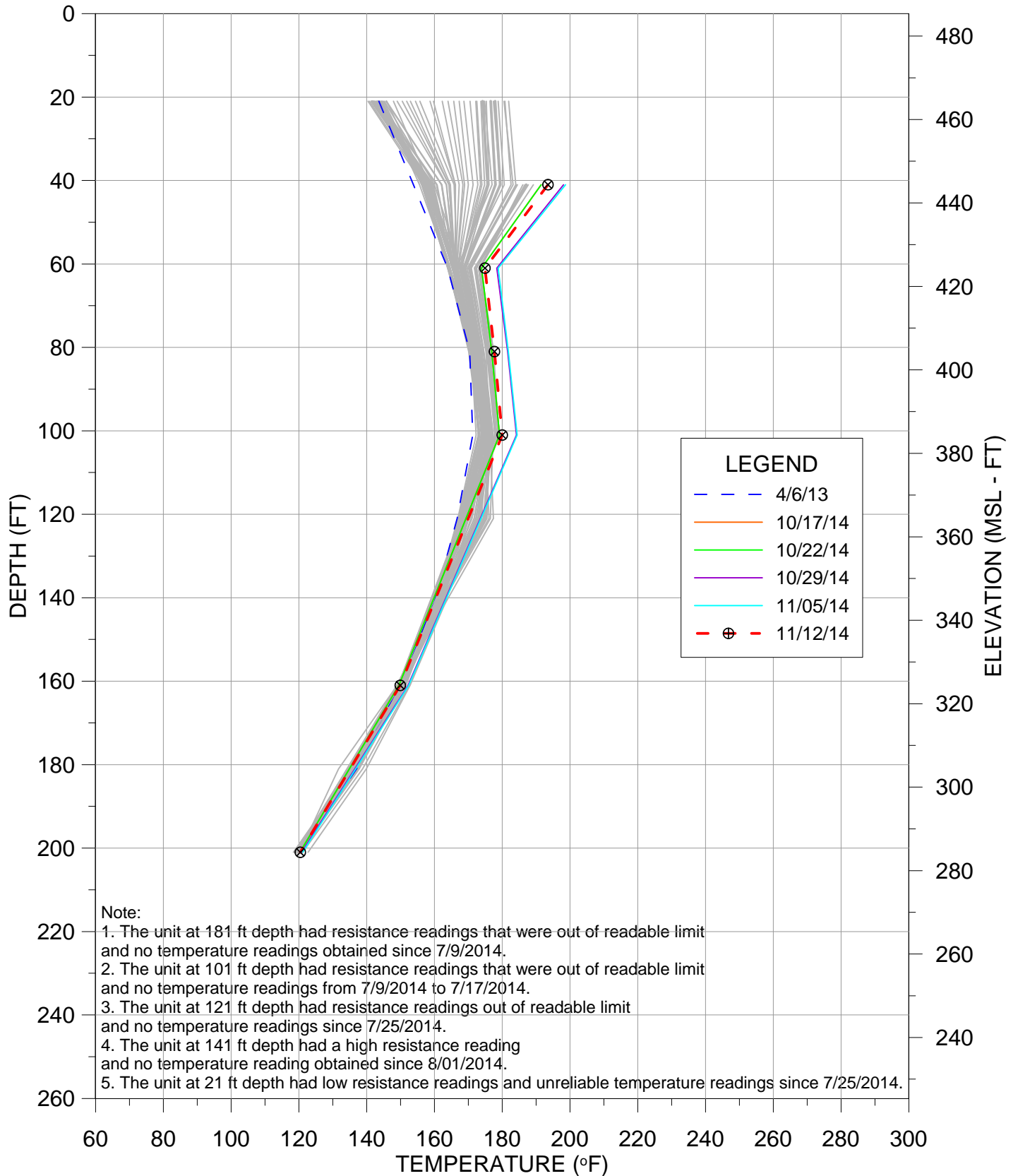


TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

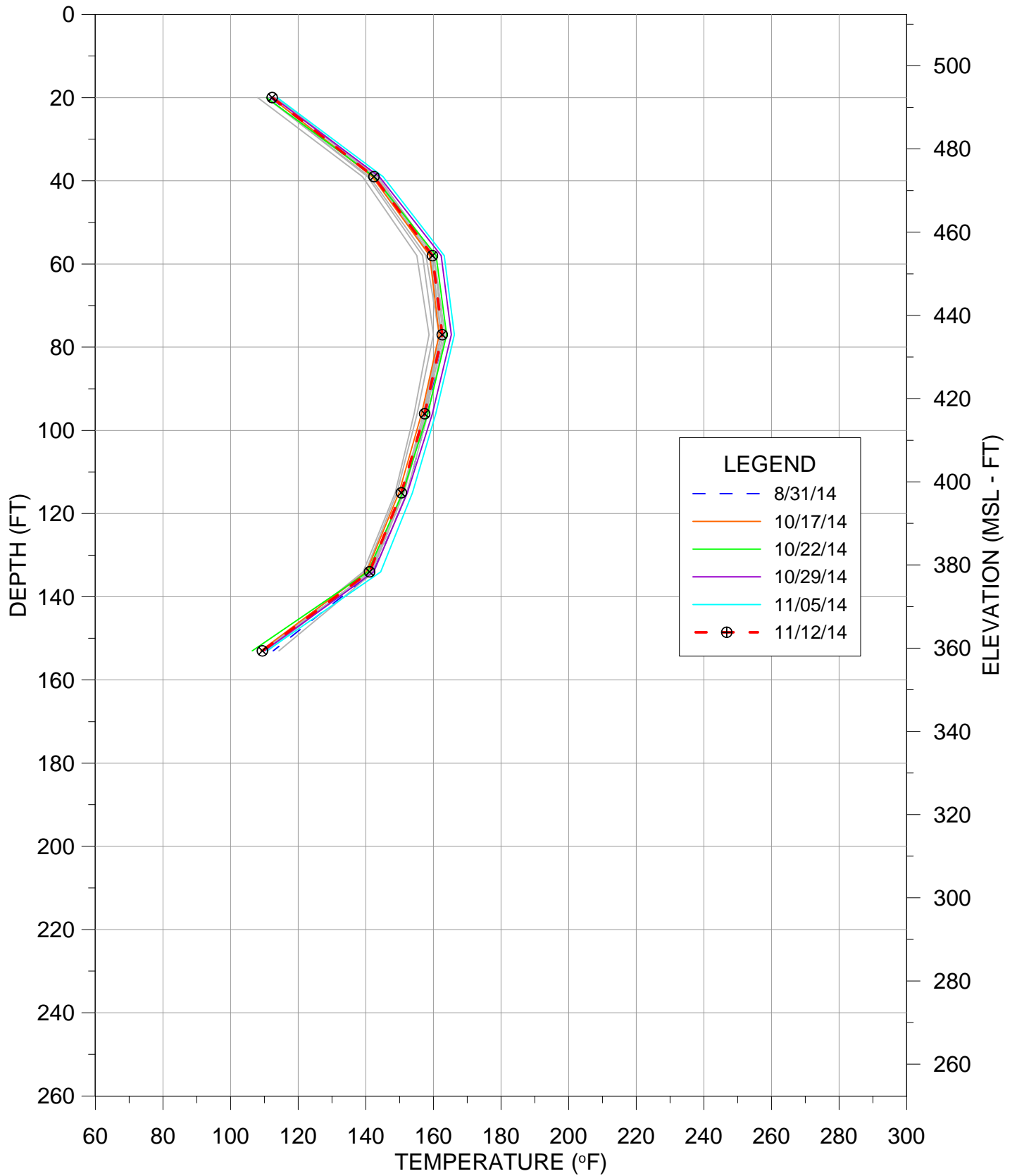
TMP-12



TMP-14

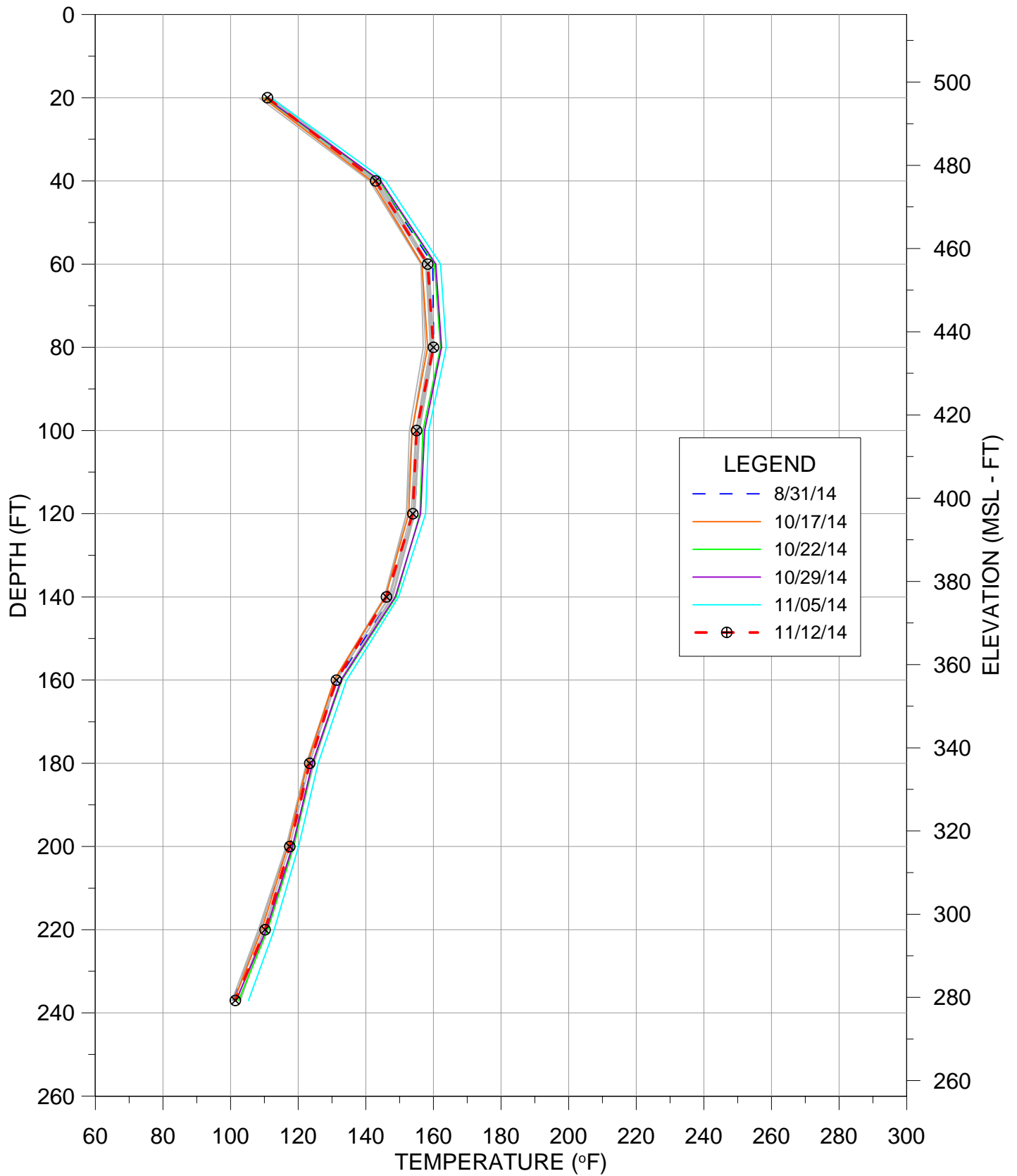


TMP-16



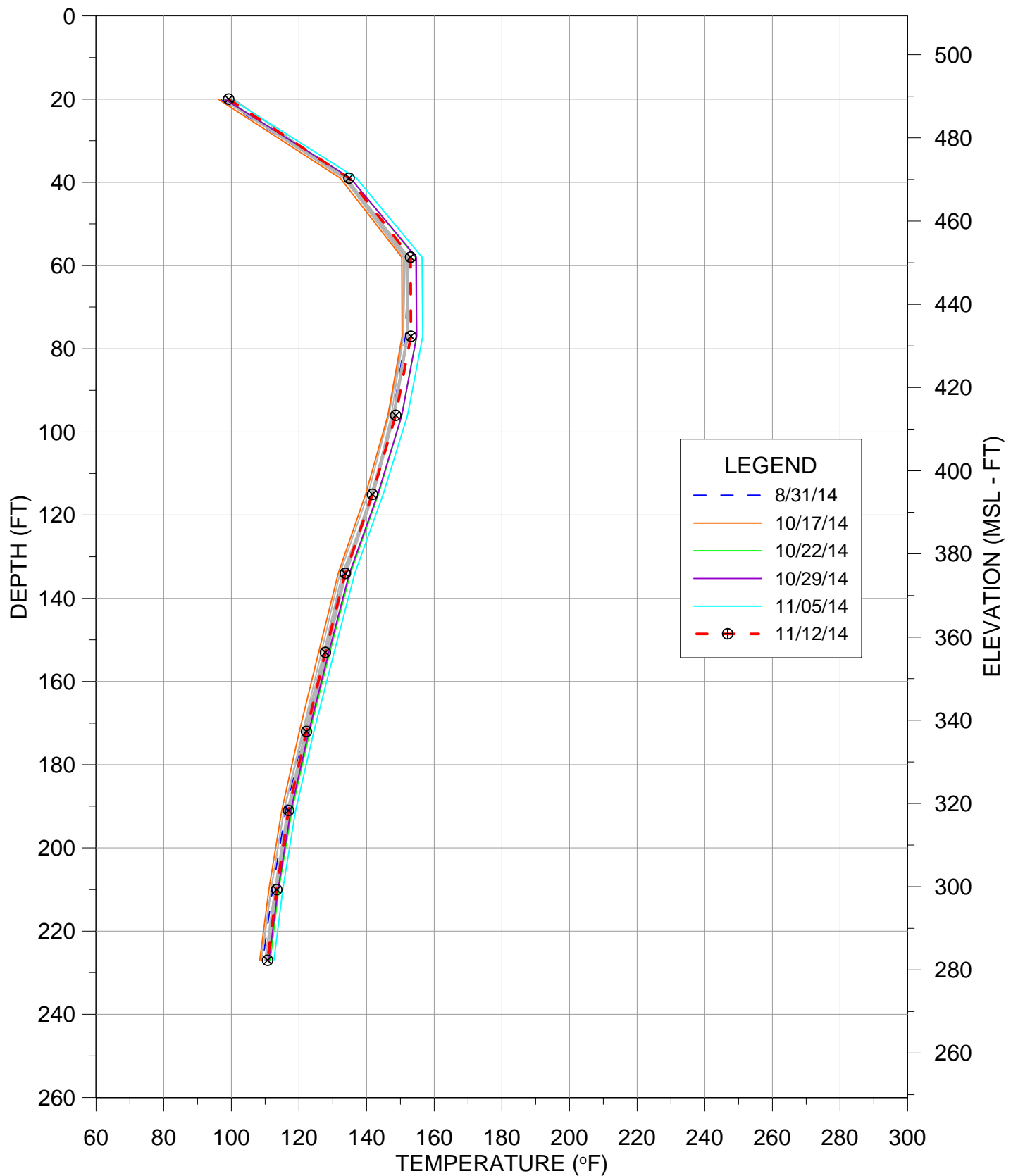
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-17



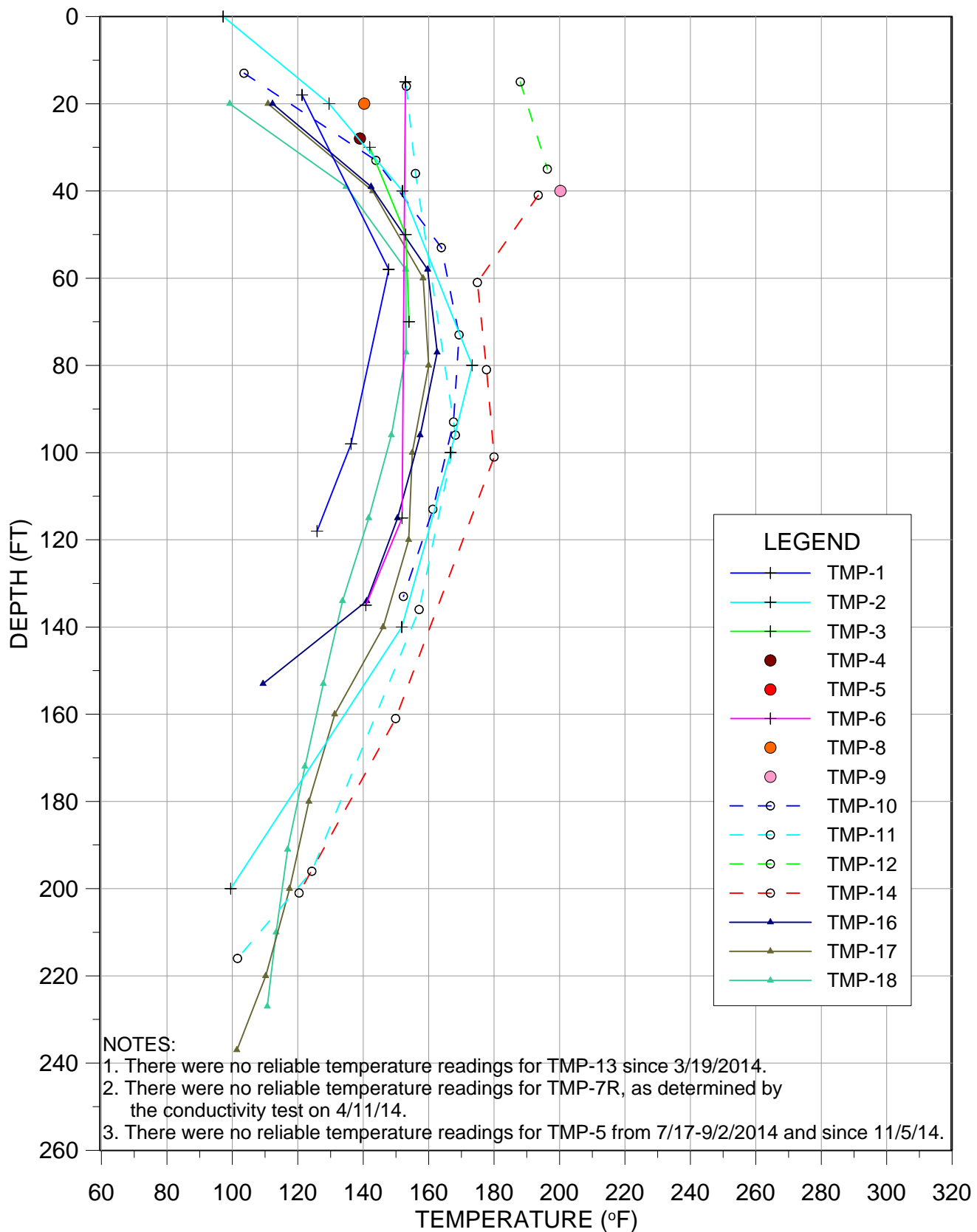
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

TMP-18



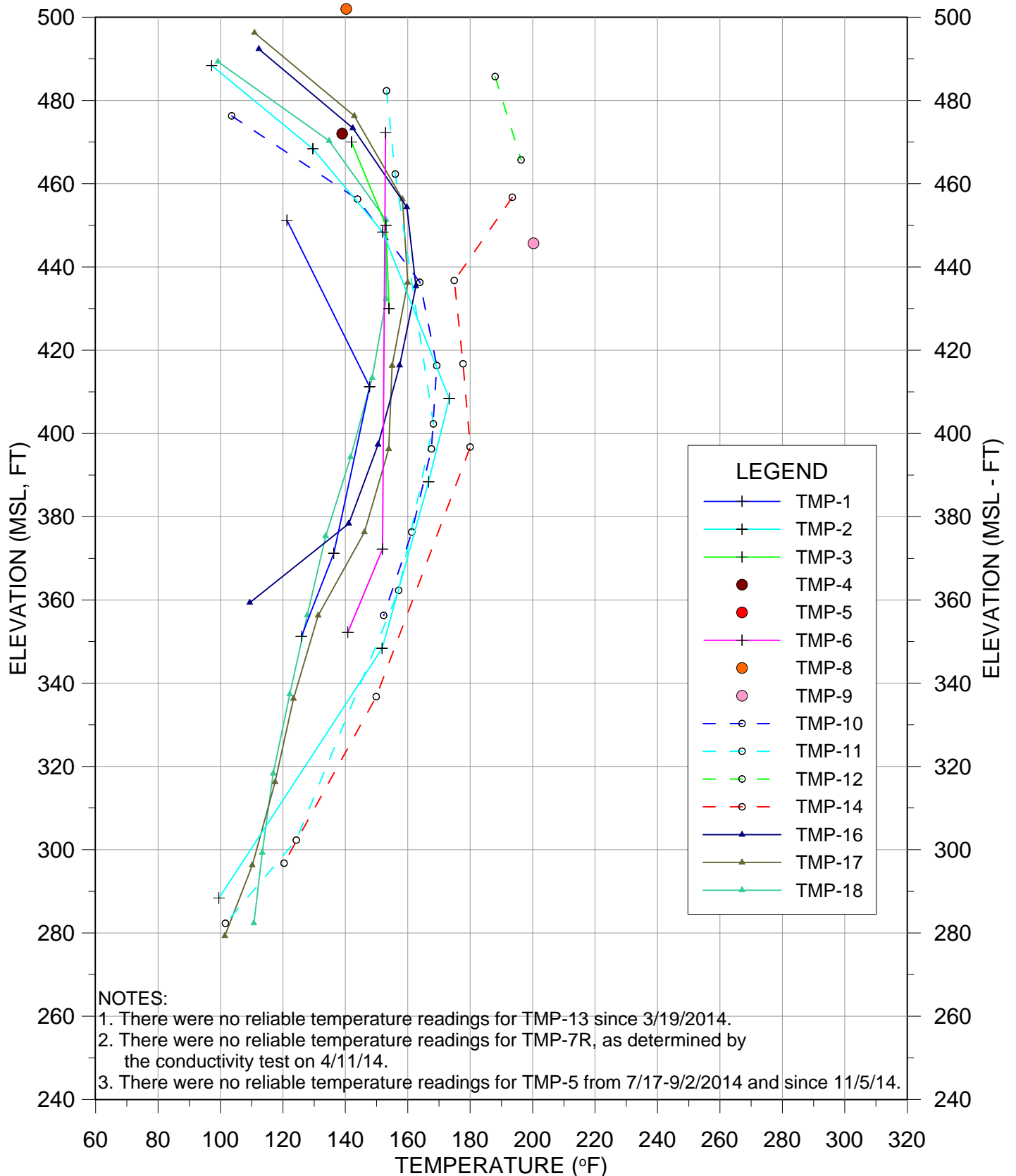
TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

11/12/2014 -DEPTH

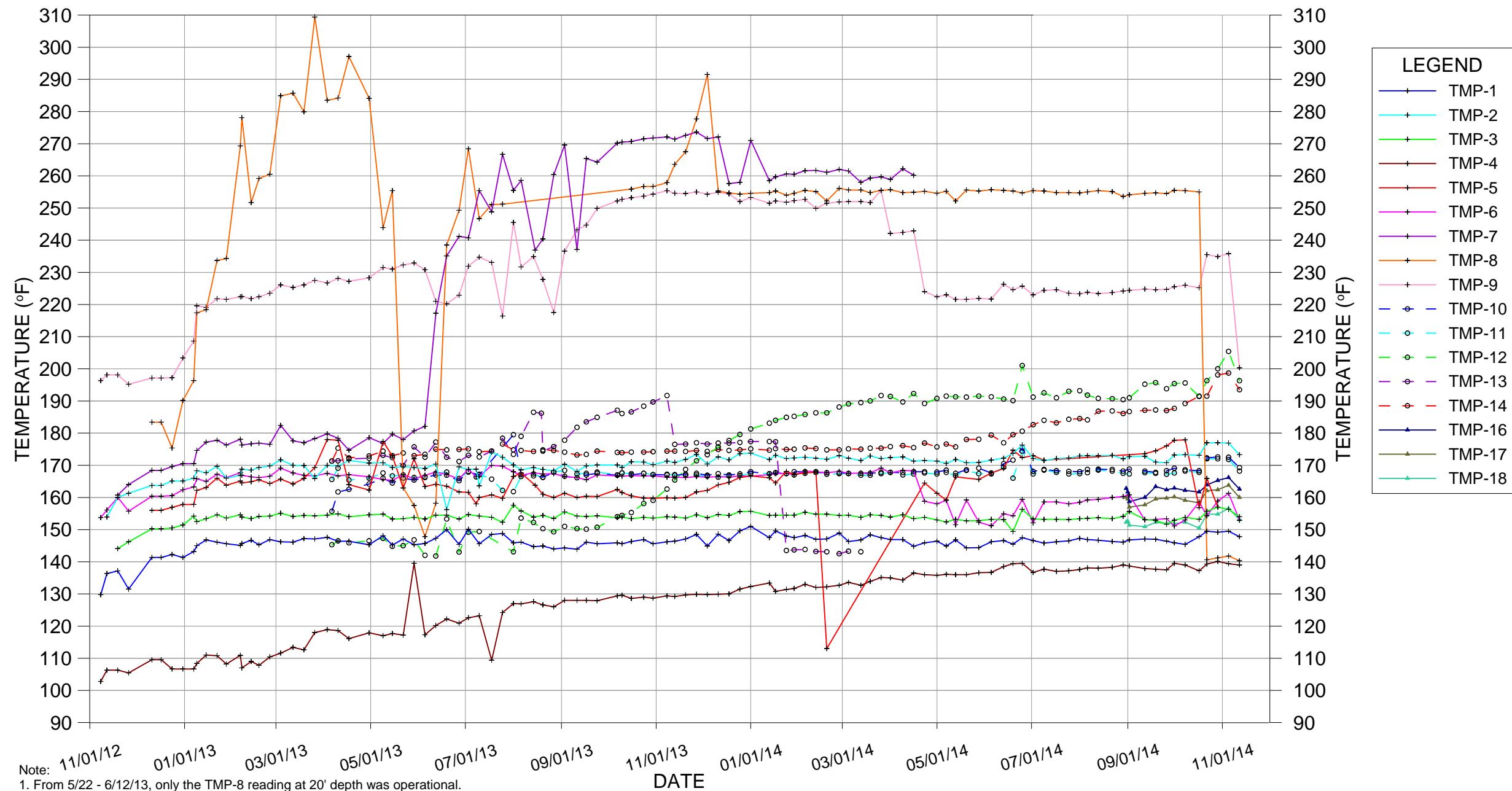


TEMPERATURE VS DEPTH
BRIDGETON LANDFILL

11/12/2014 - ELEVATION



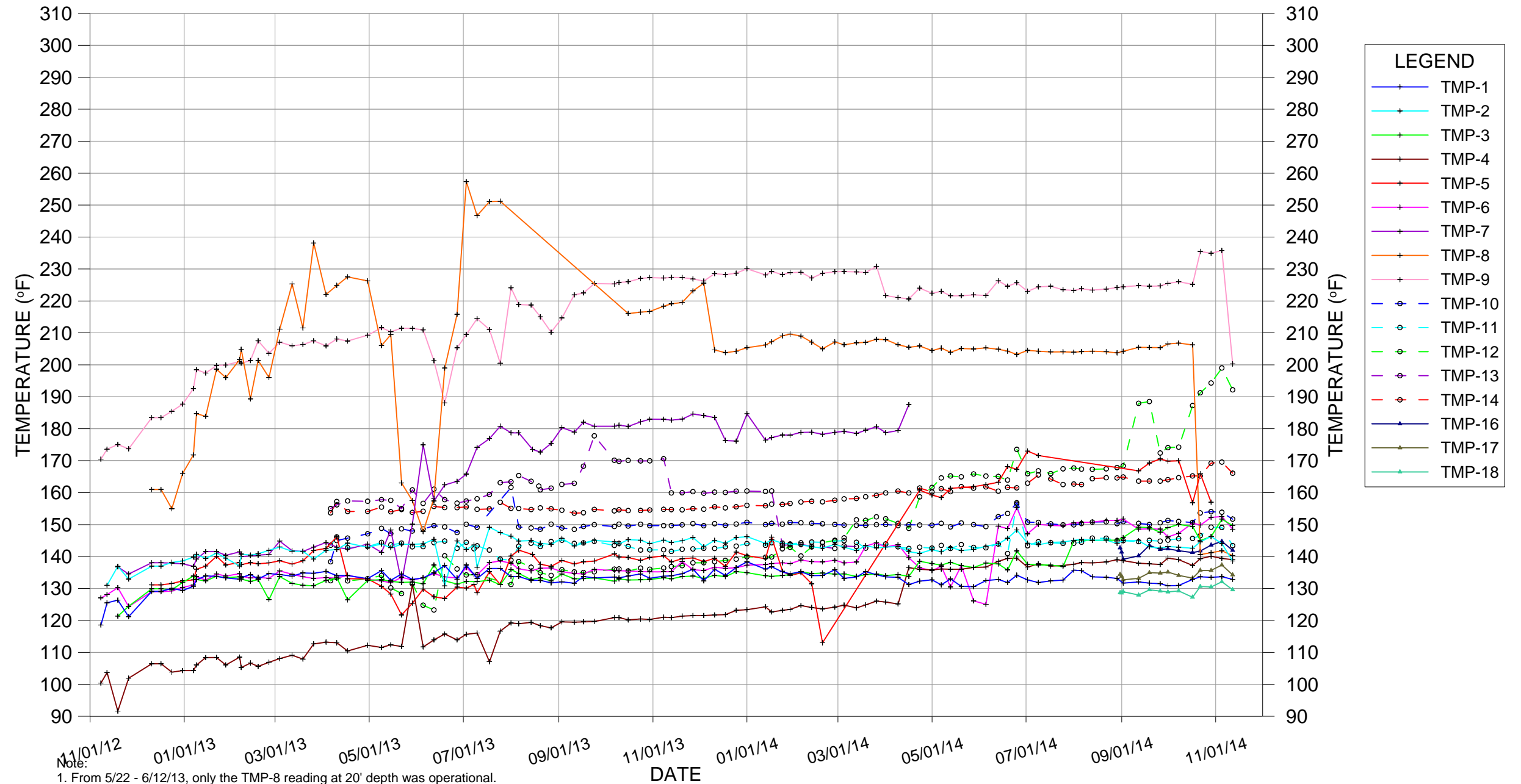
MAXIMUM TEMPERATURES



- 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 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

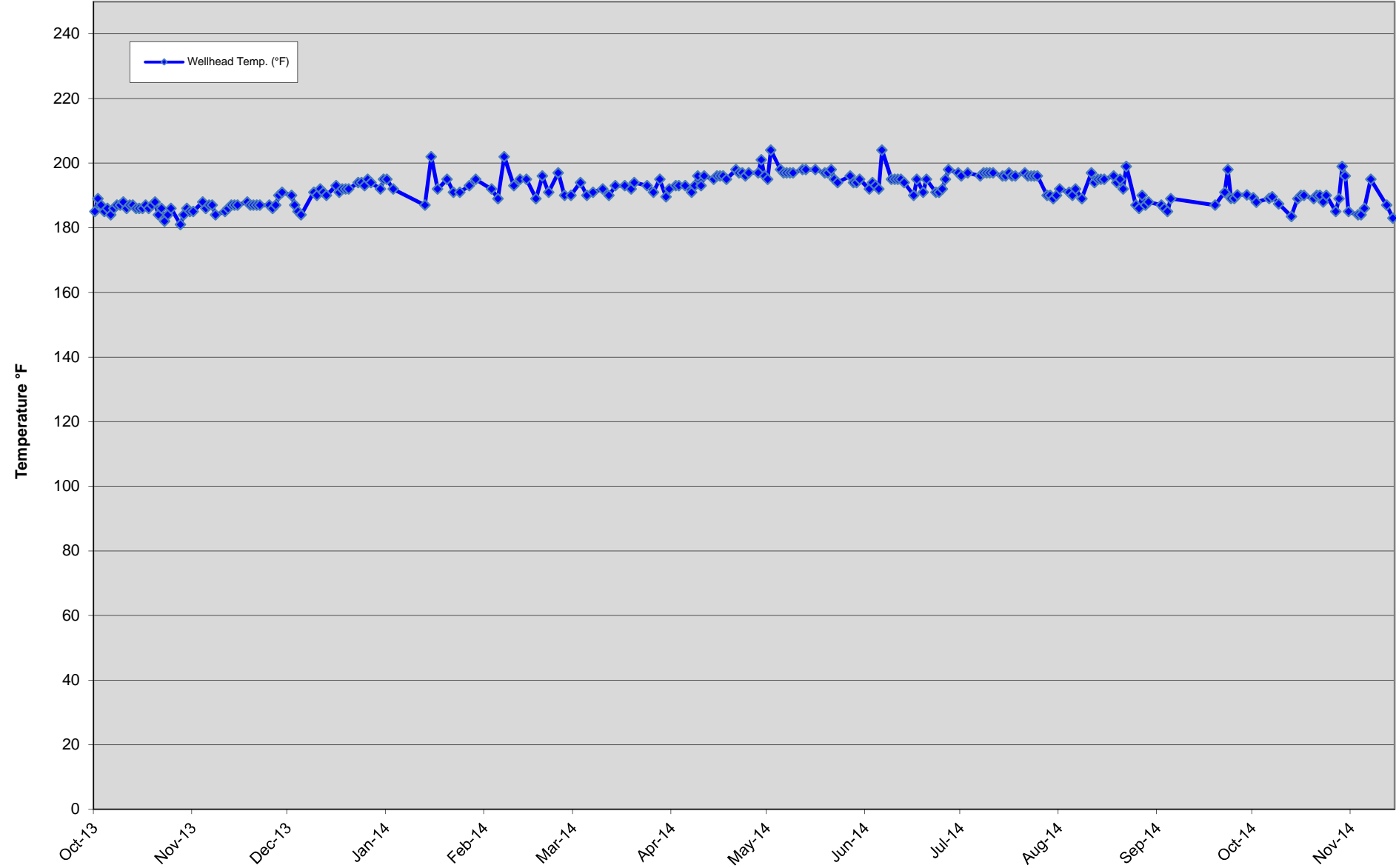


TEMPERATURE VS TIME
BRIDGETON LANDFILL

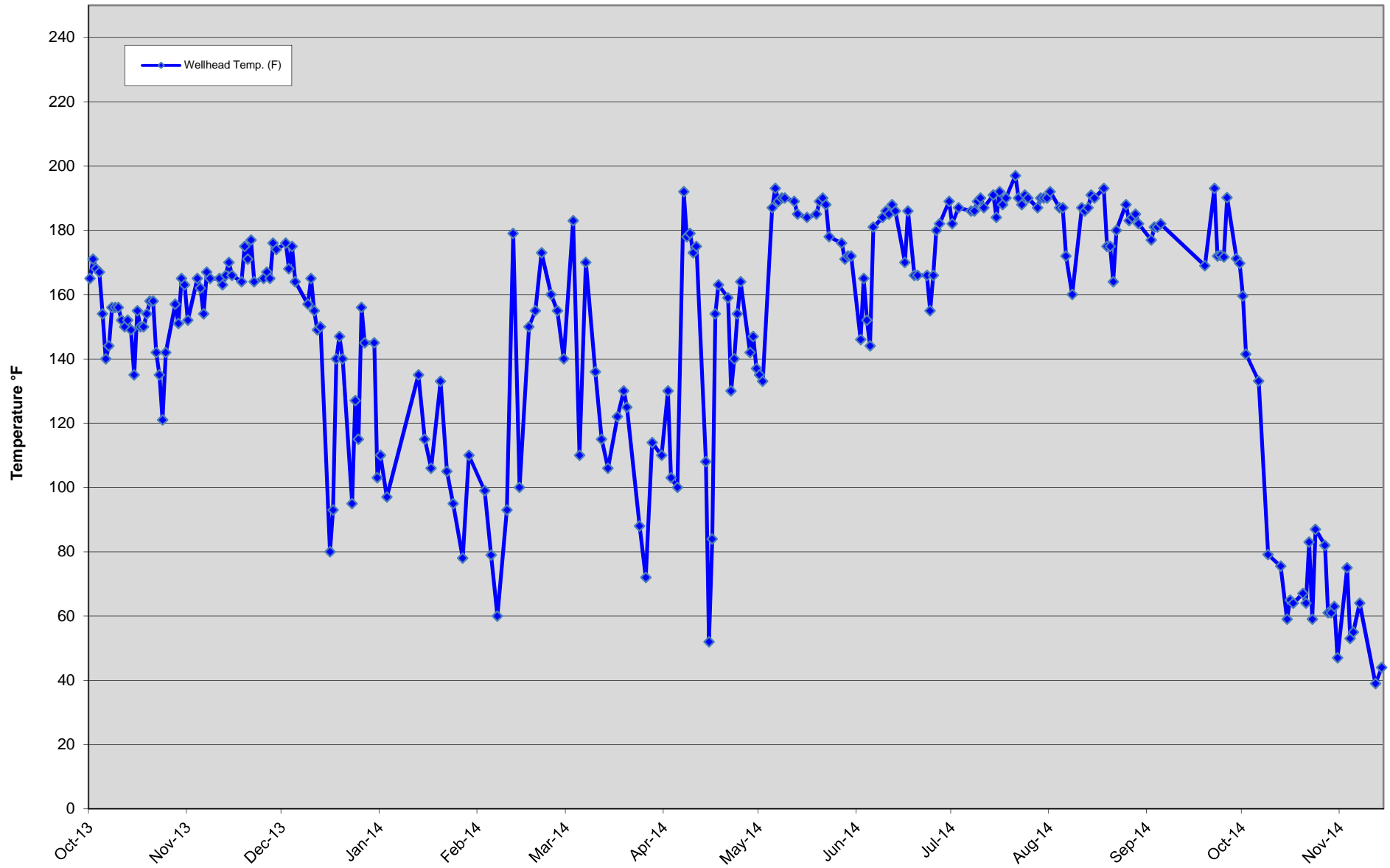
ATTACHMENT C

GAS INTERCEPTOR WELLHEAD TEMPERATURE GRAPHS

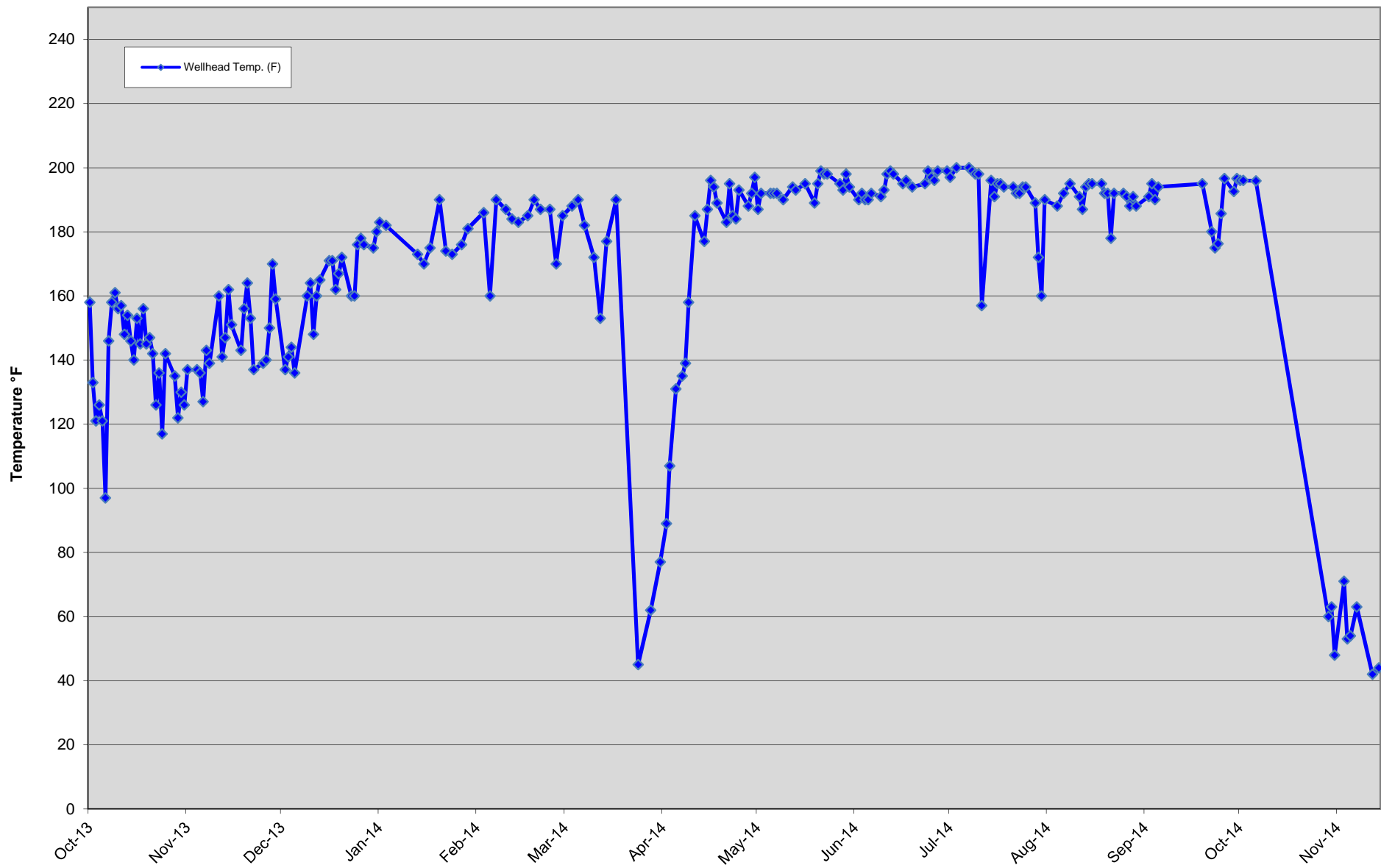
GIW-1 Wellhead Temperatures



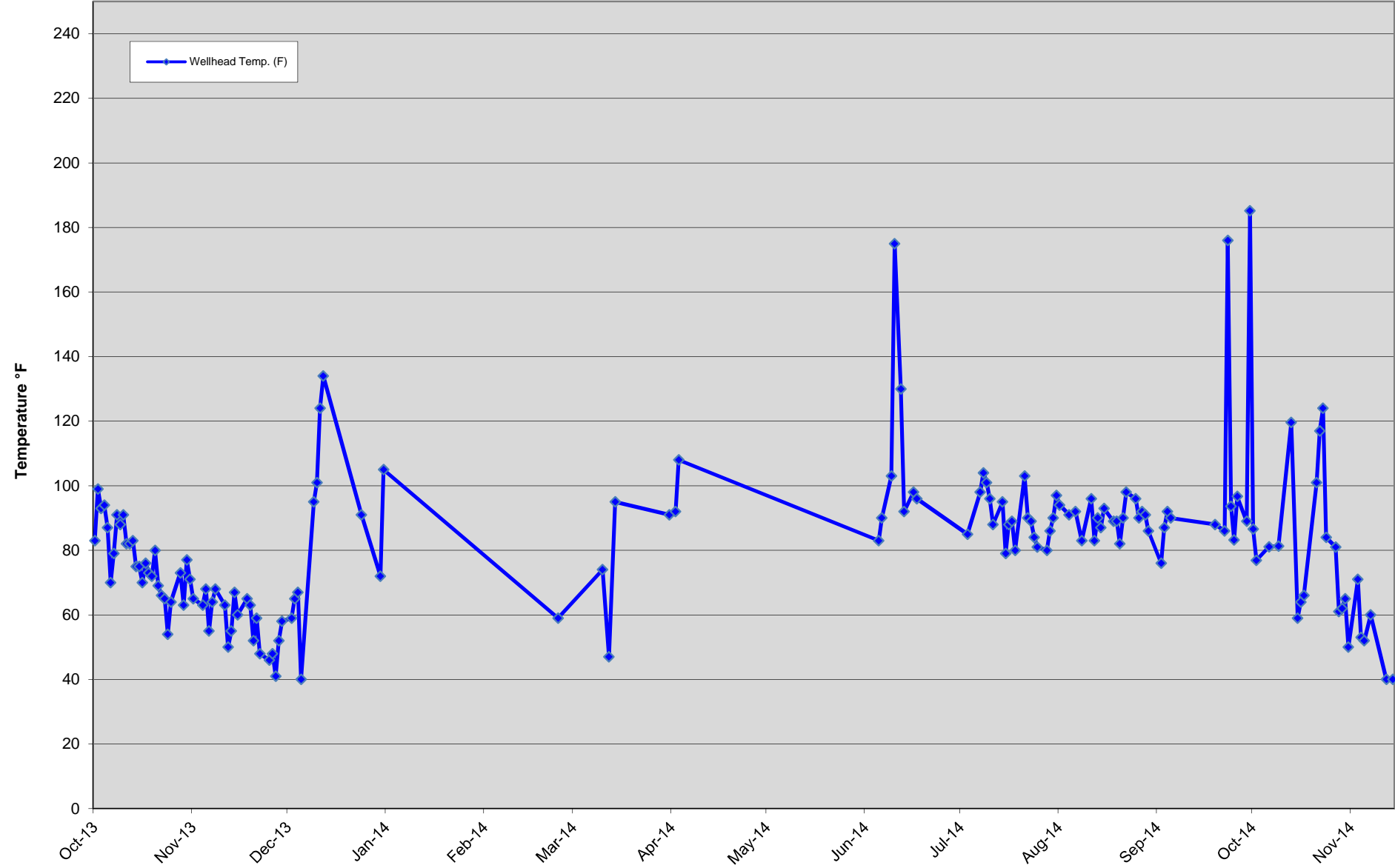
GIW-2 Wellhead Temperatures



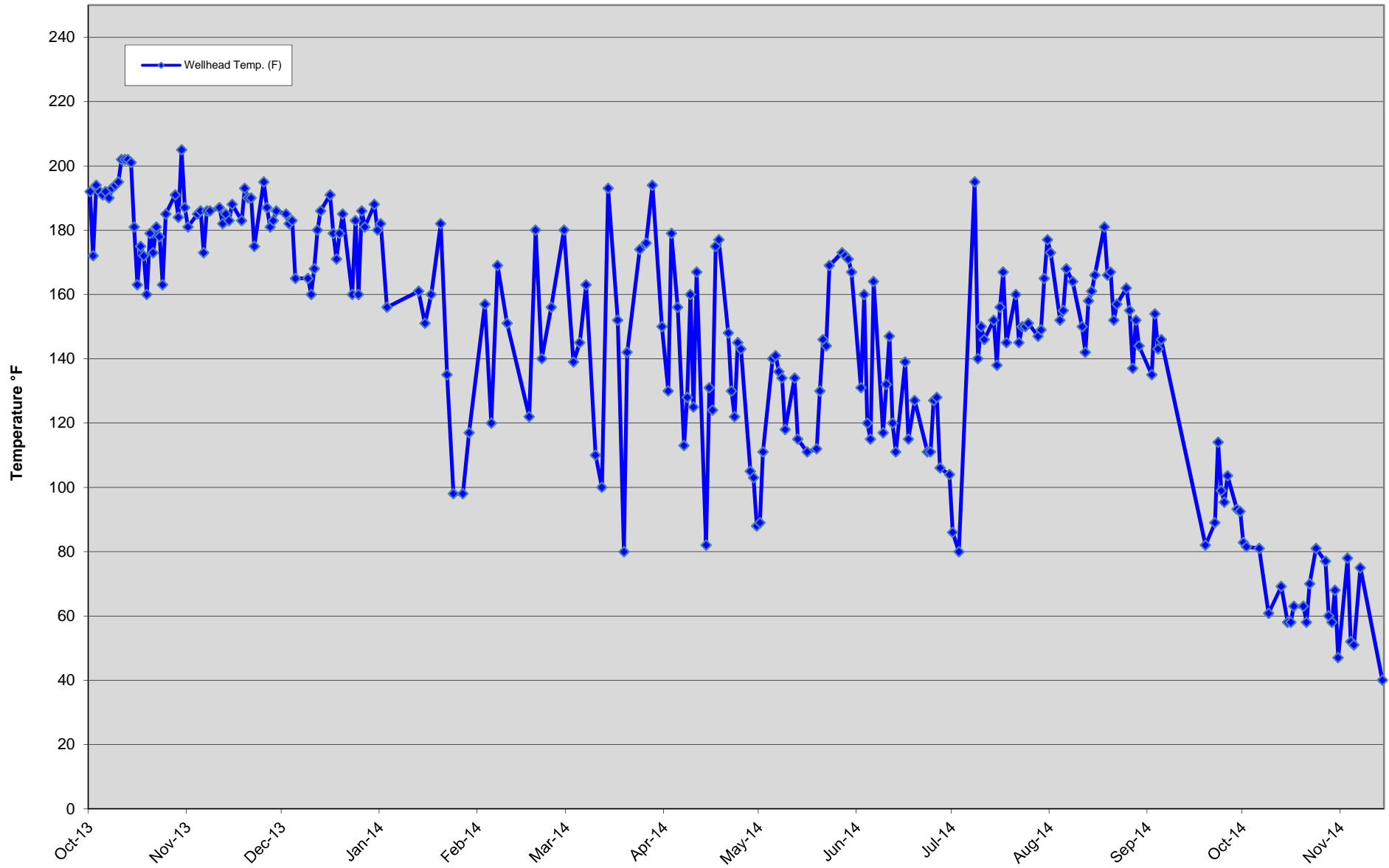
GIW-3 Wellhead Temperatures



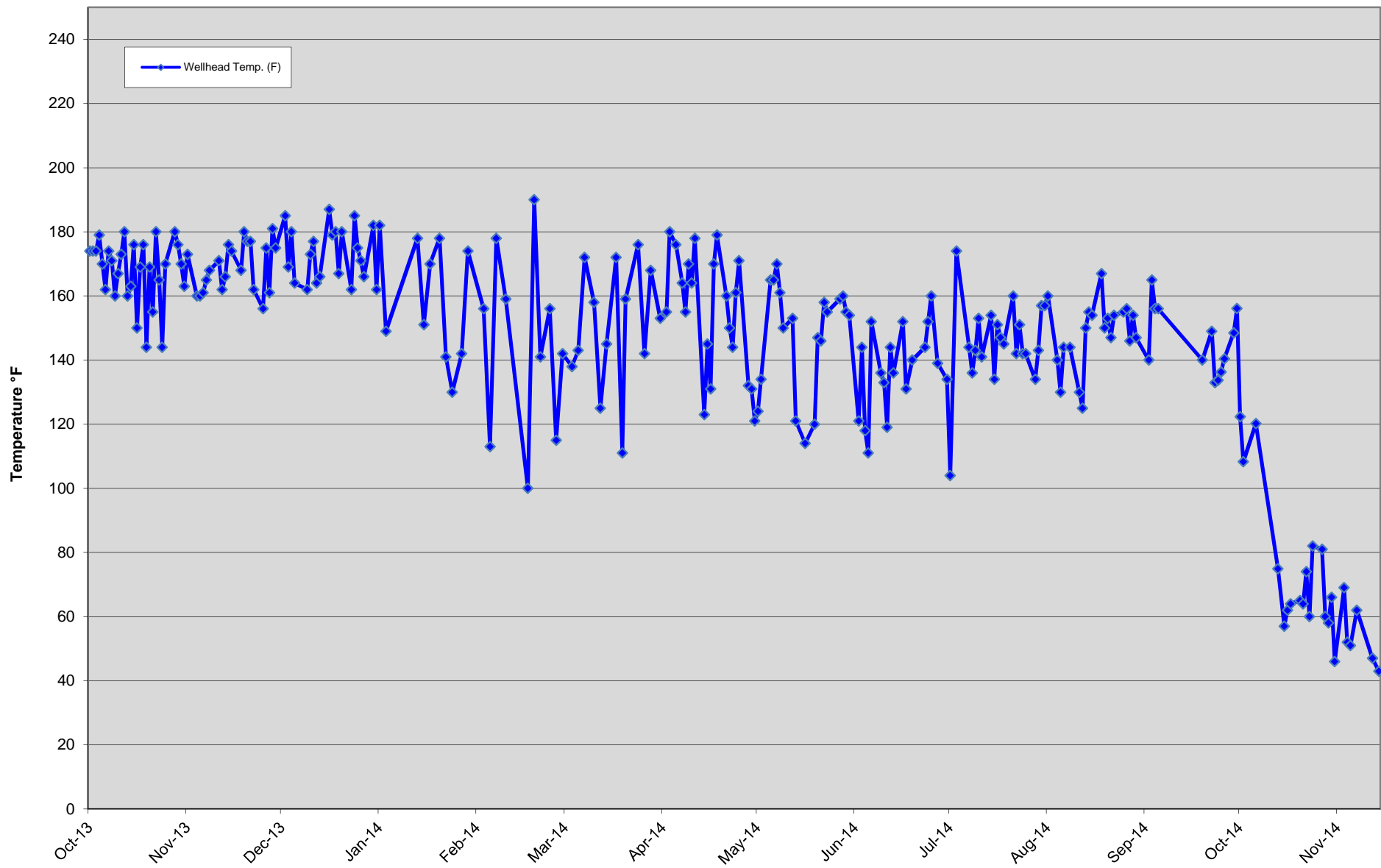
GIW-4 Wellhead Temperatures



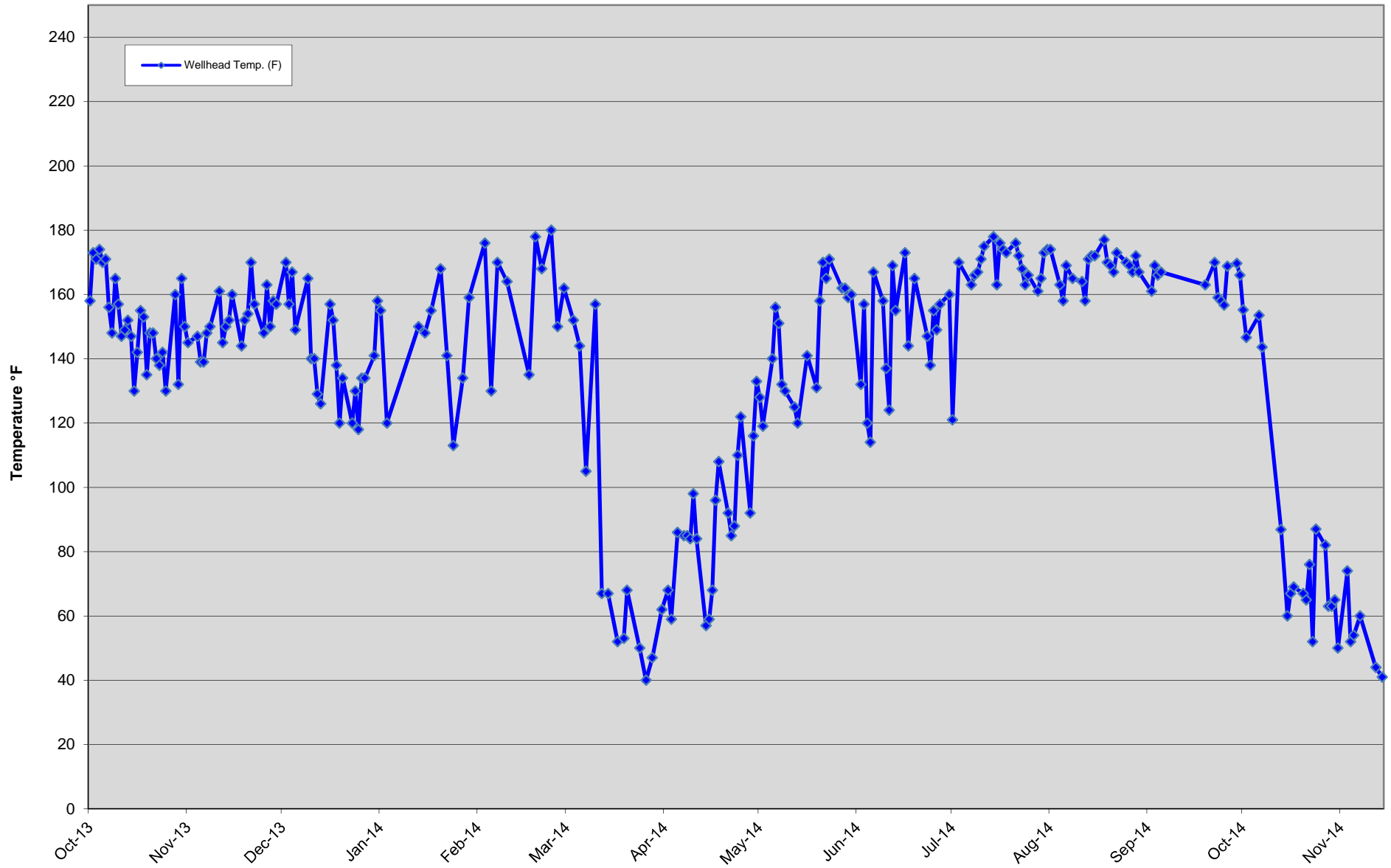
GIW-5 Wellhead Temperatures



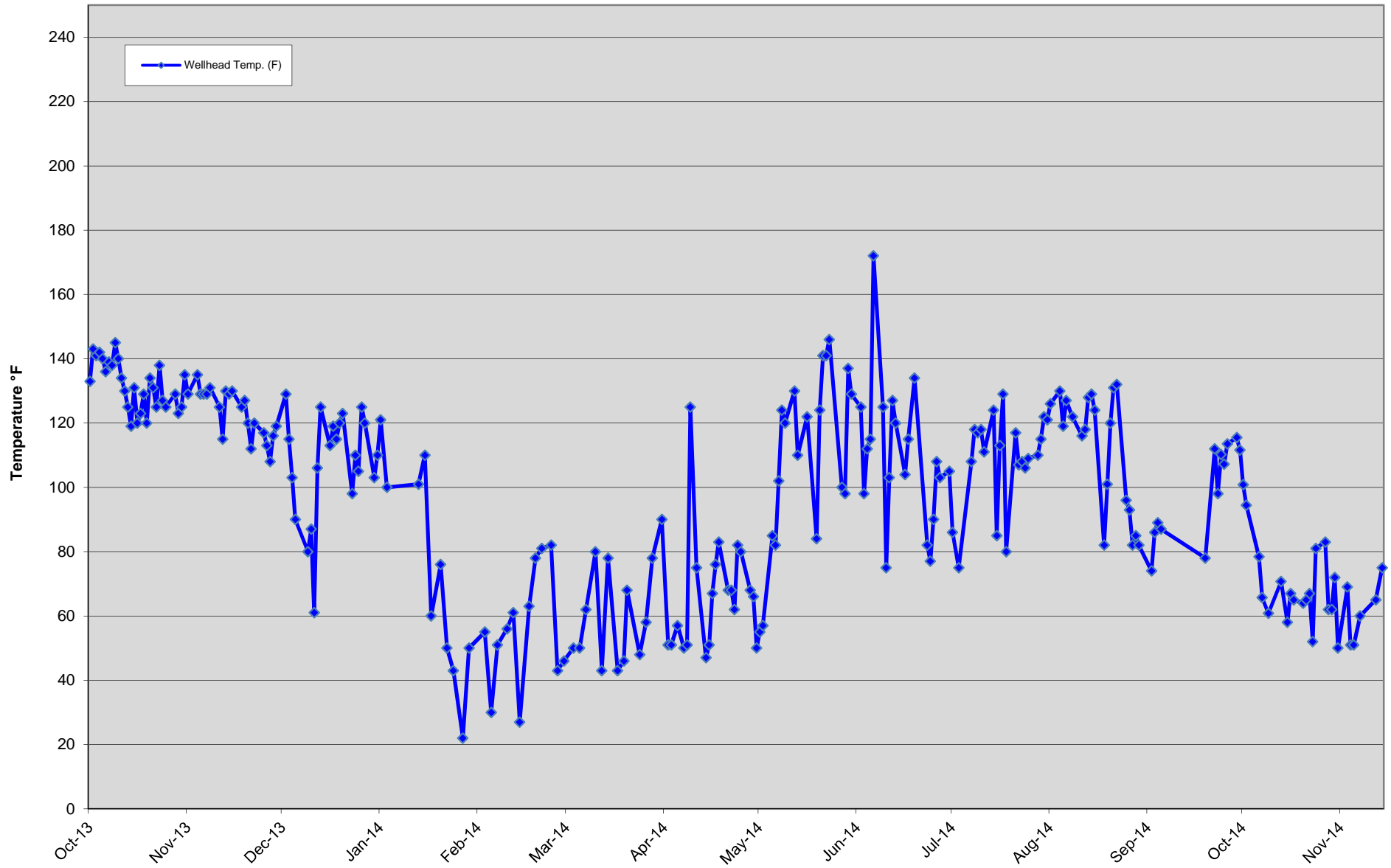
GIW-6 Wellhead Temperatures



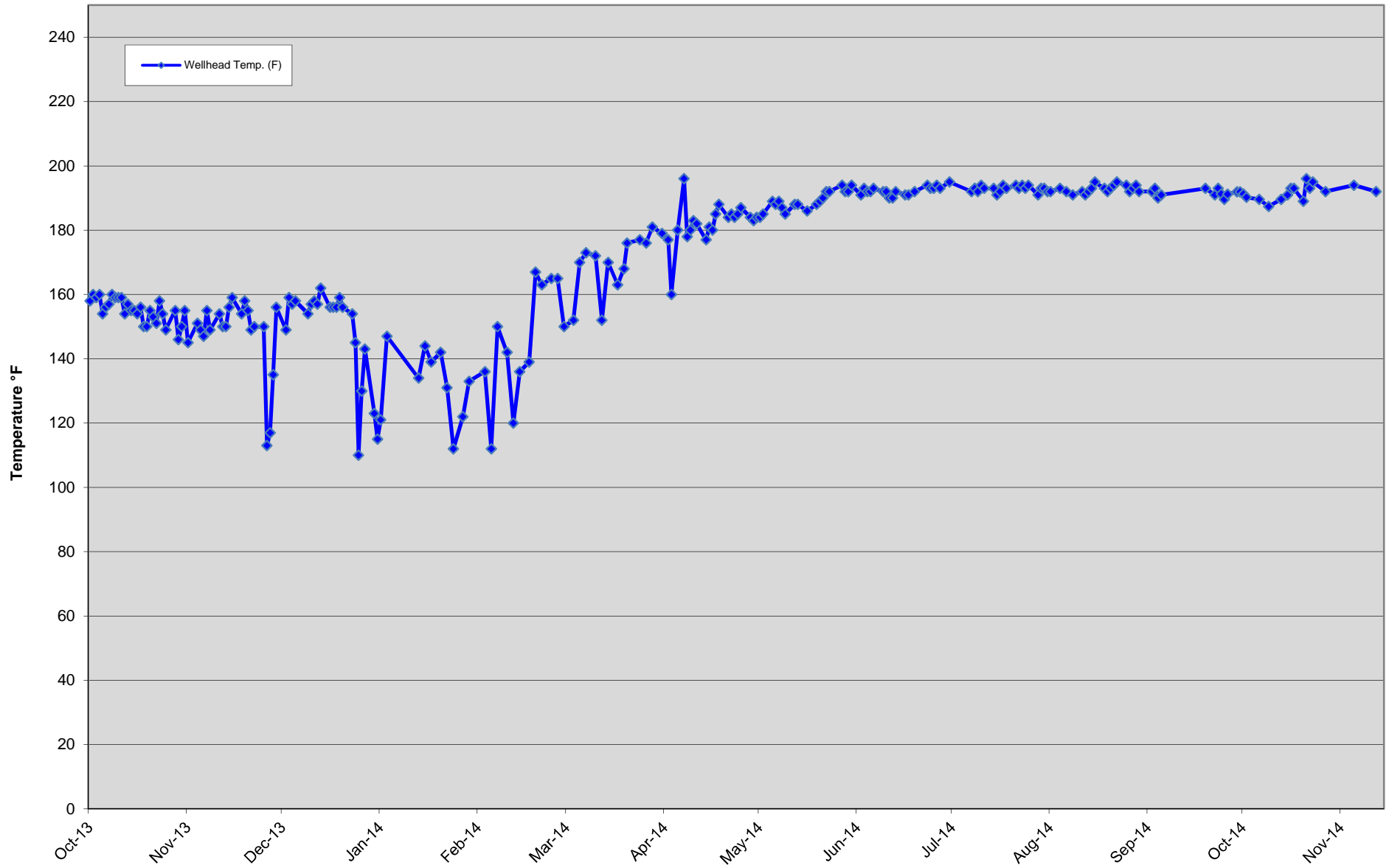
GIW-7 Wellhead Temperatures



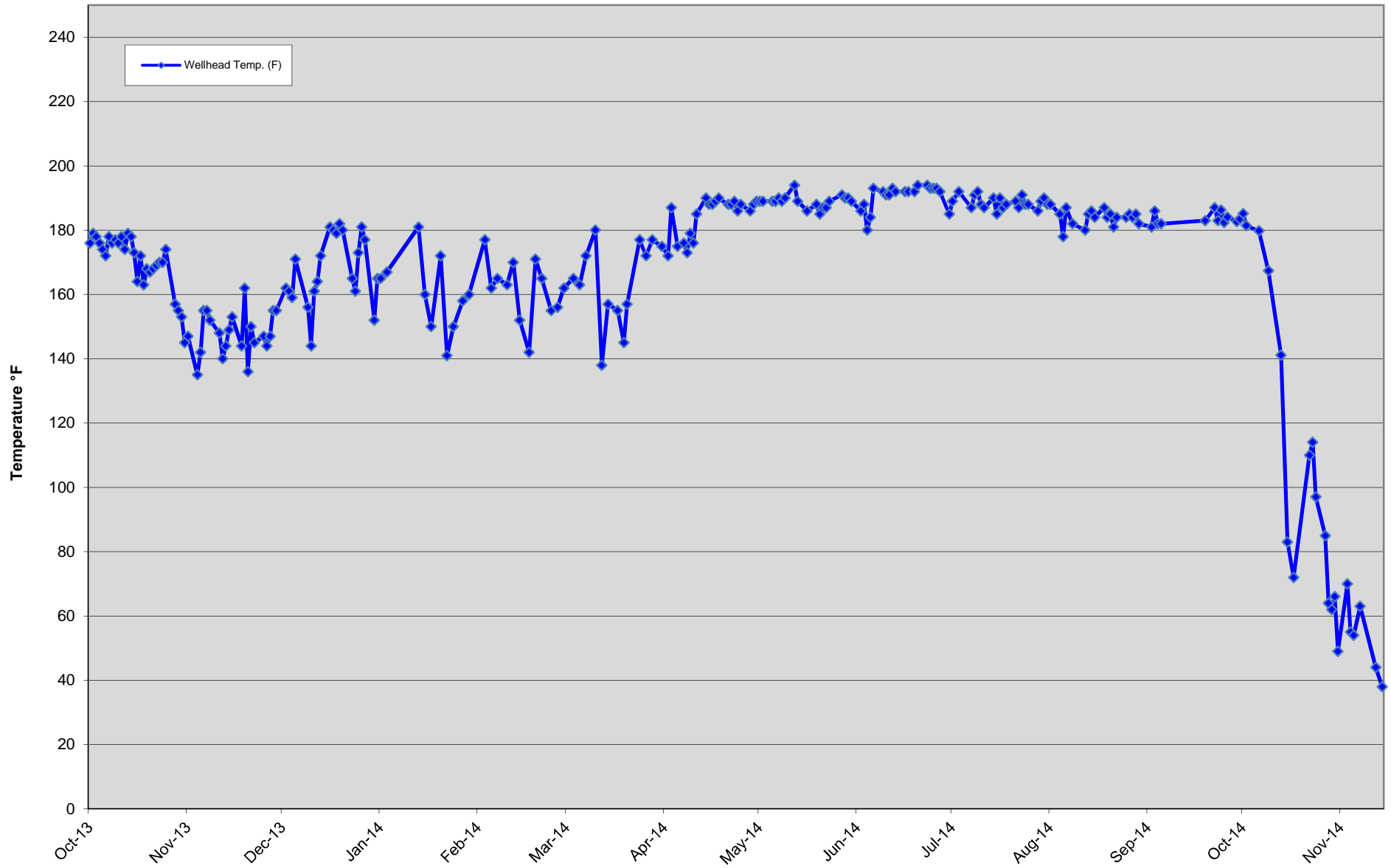
GIW-8 Wellhead Temperatures



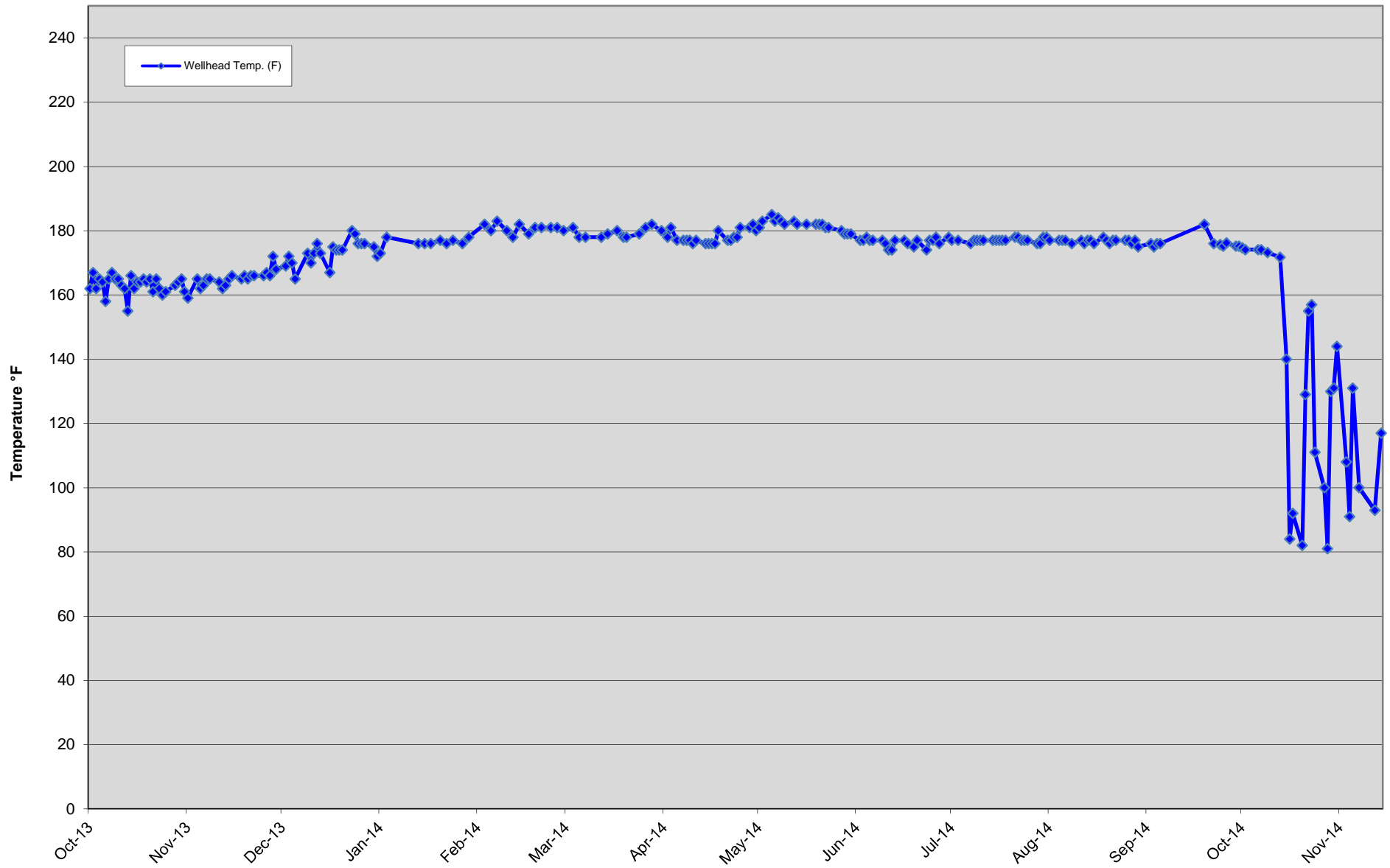
GIW-9 Wellhead Temperatures



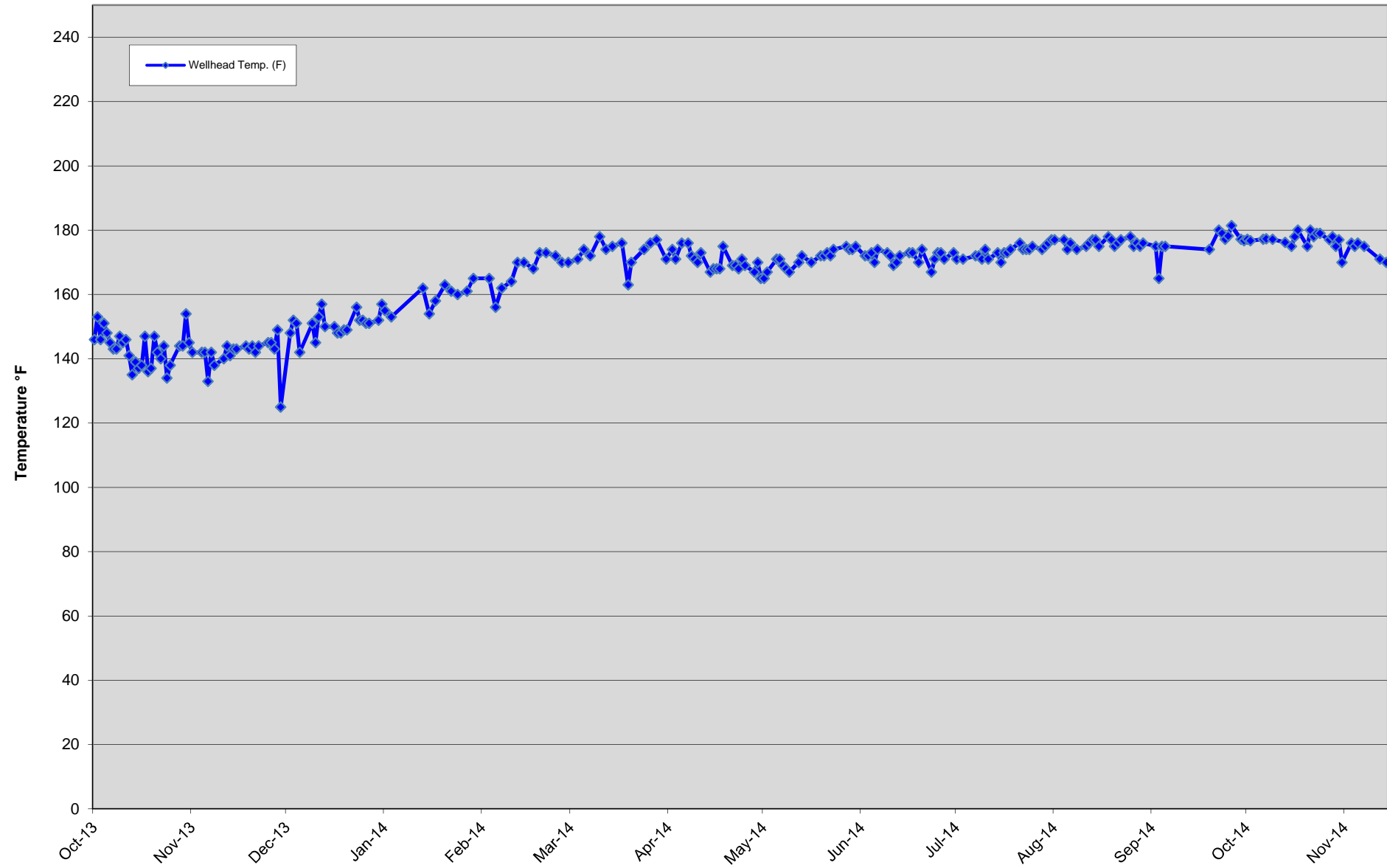
GIW-10 Wellhead Temperatures



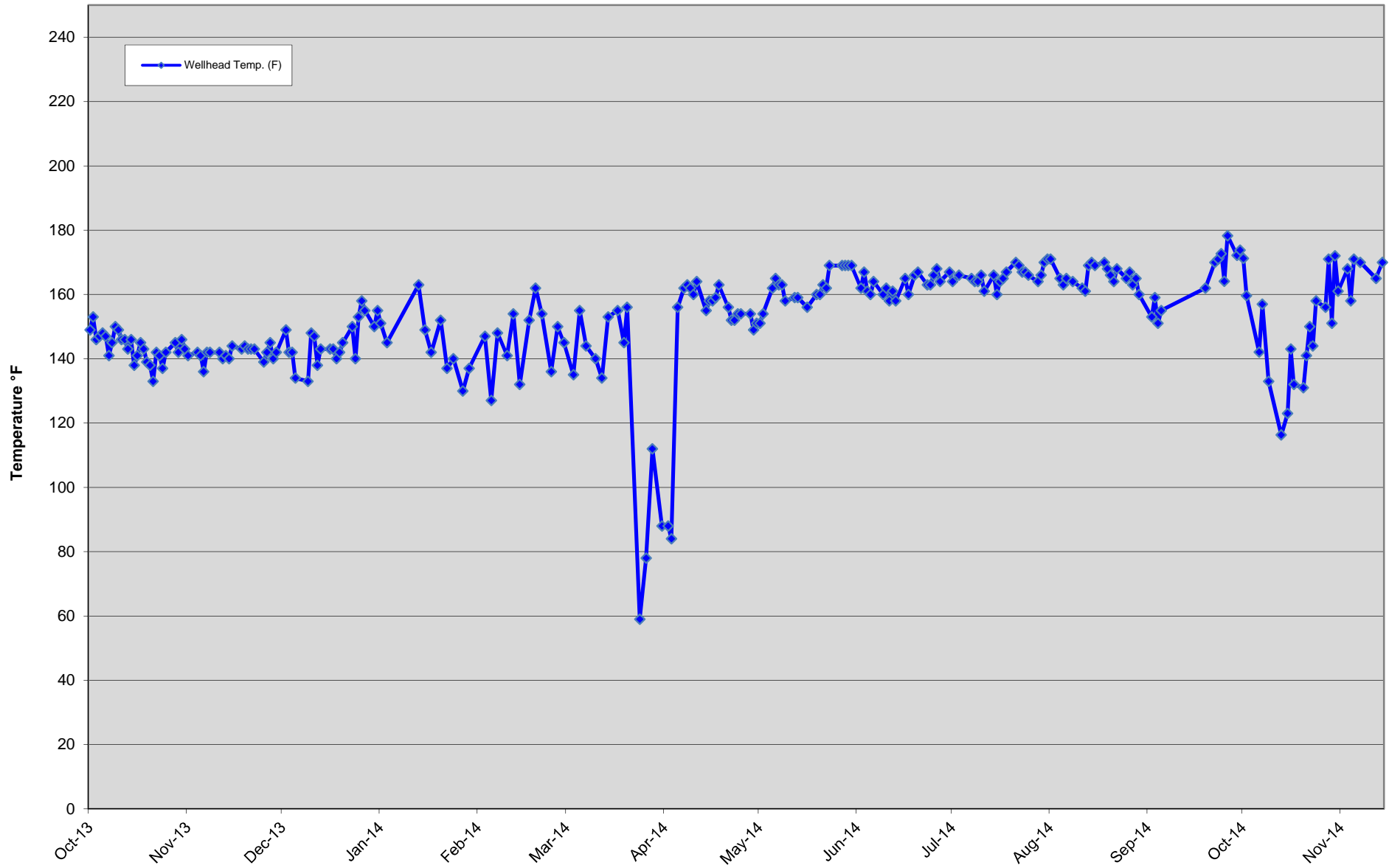
GIW-11 Wellhead Temperatures



GIW-12 Wellhead Temperatures



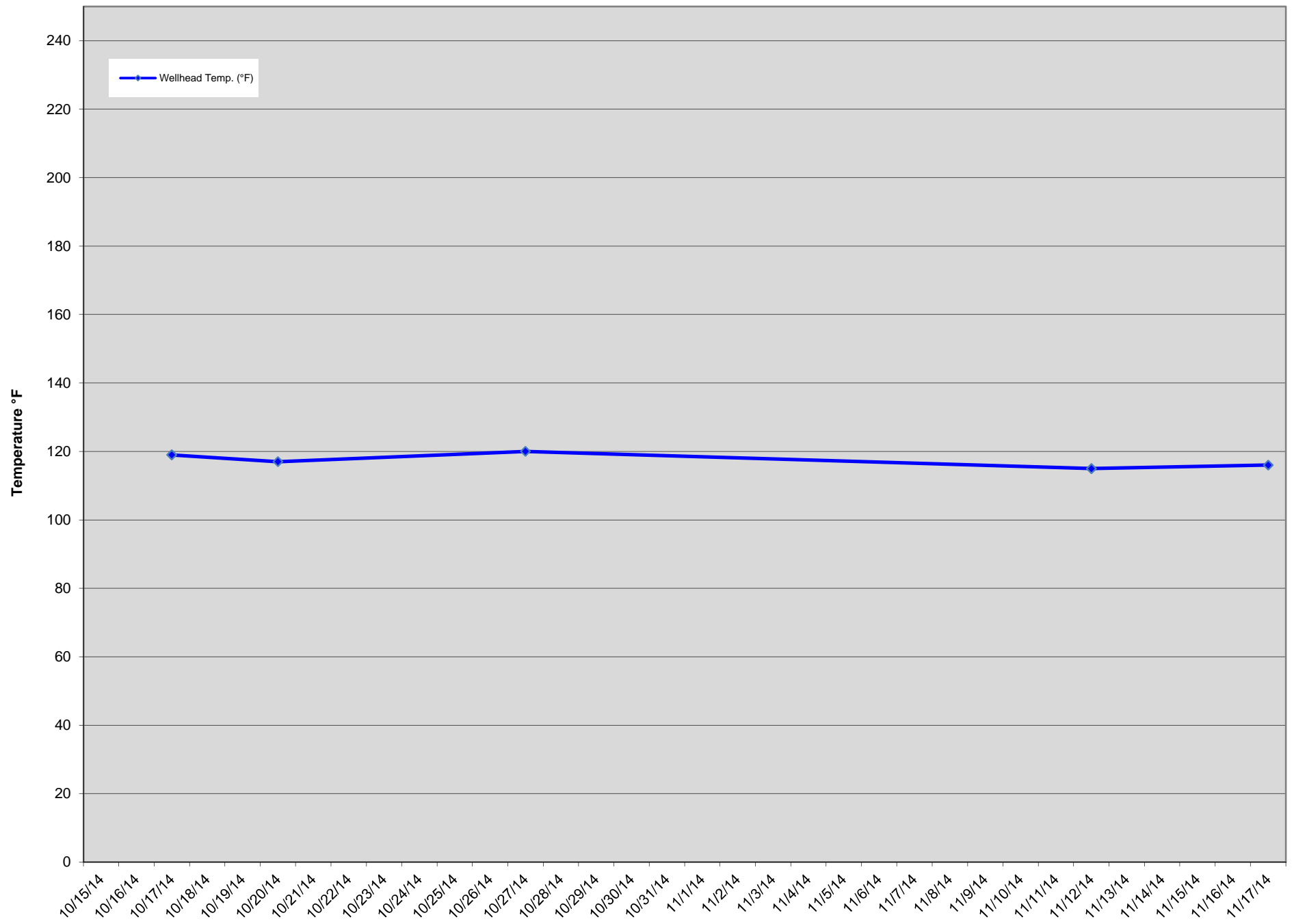
GIW-13 Wellhead Temperatures



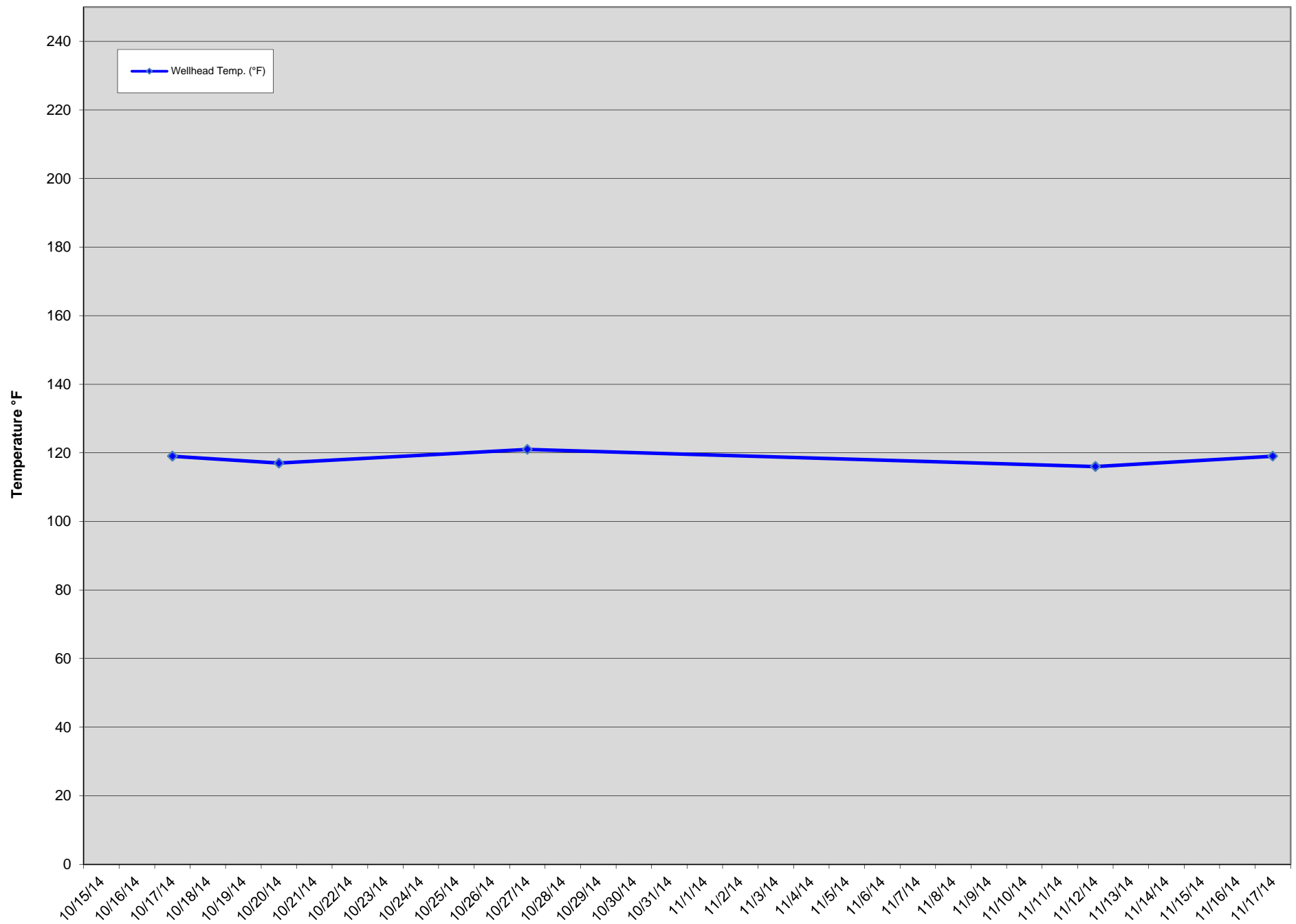
ATTACHMENT D

NECK-AREA GAS EXTRACTION WELL DATA

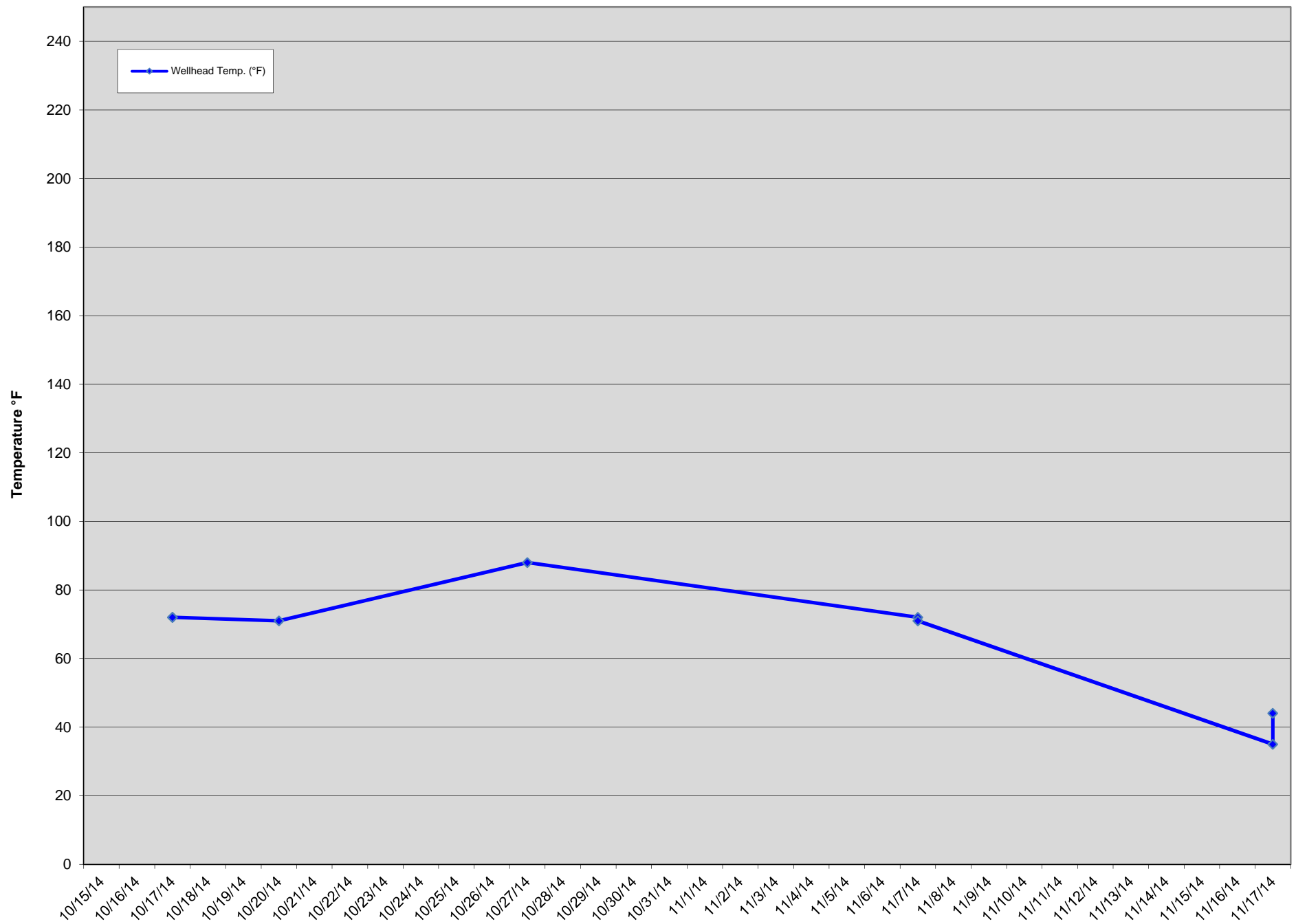
GEW-08 Wellhead Temperatures



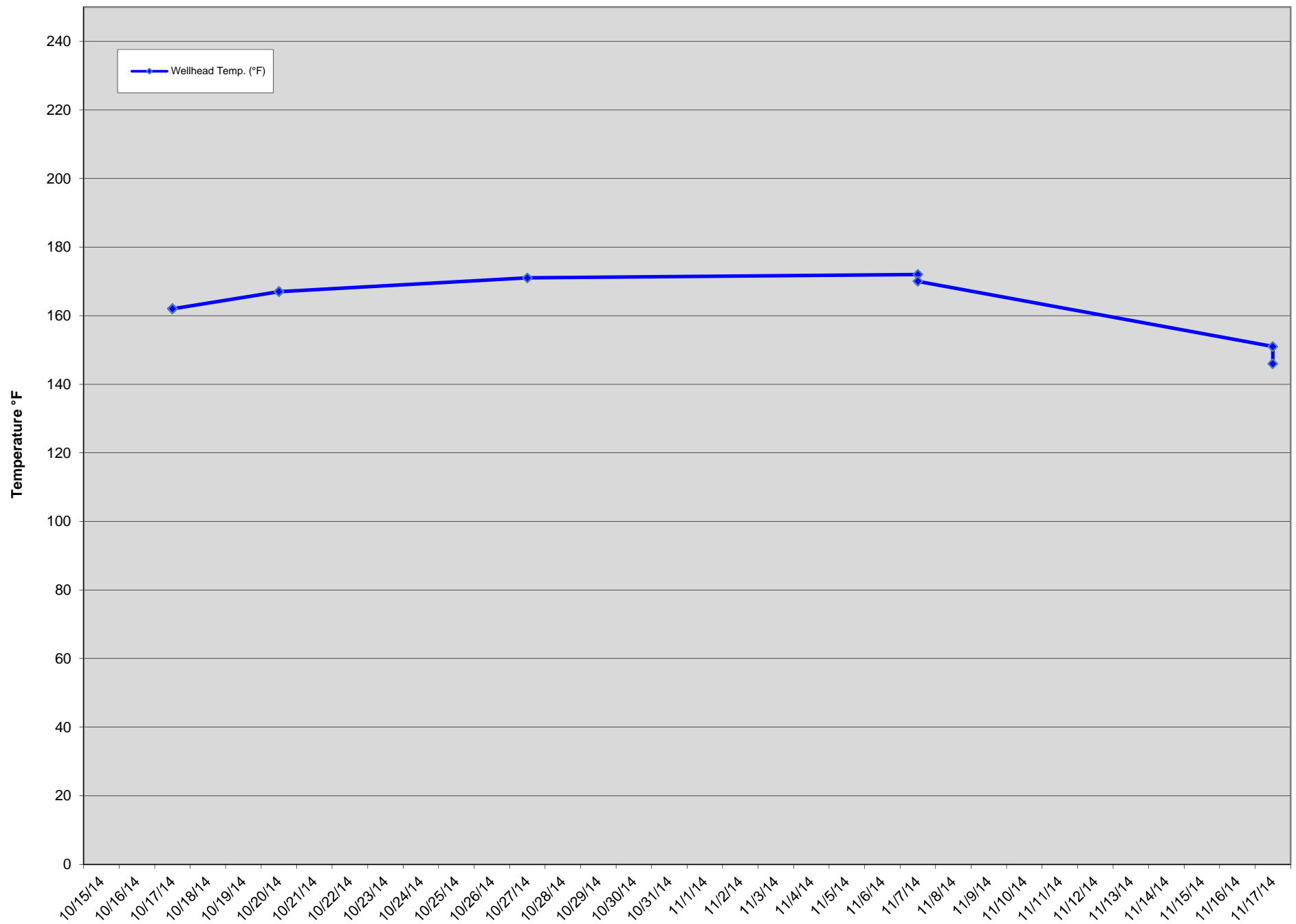
GEW-09 Wellhead Temperatures



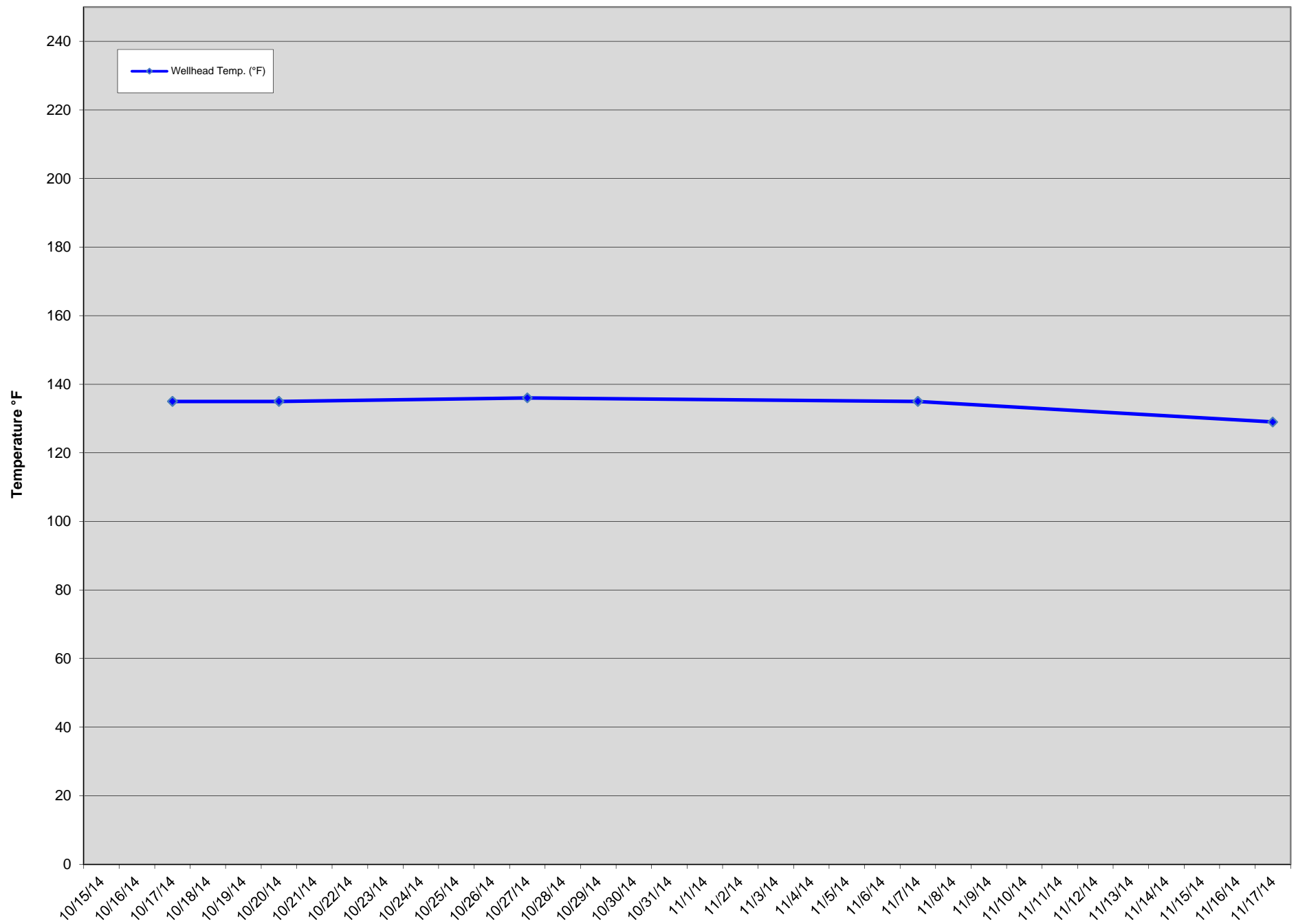
GEW-10 Wellhead Temperatures



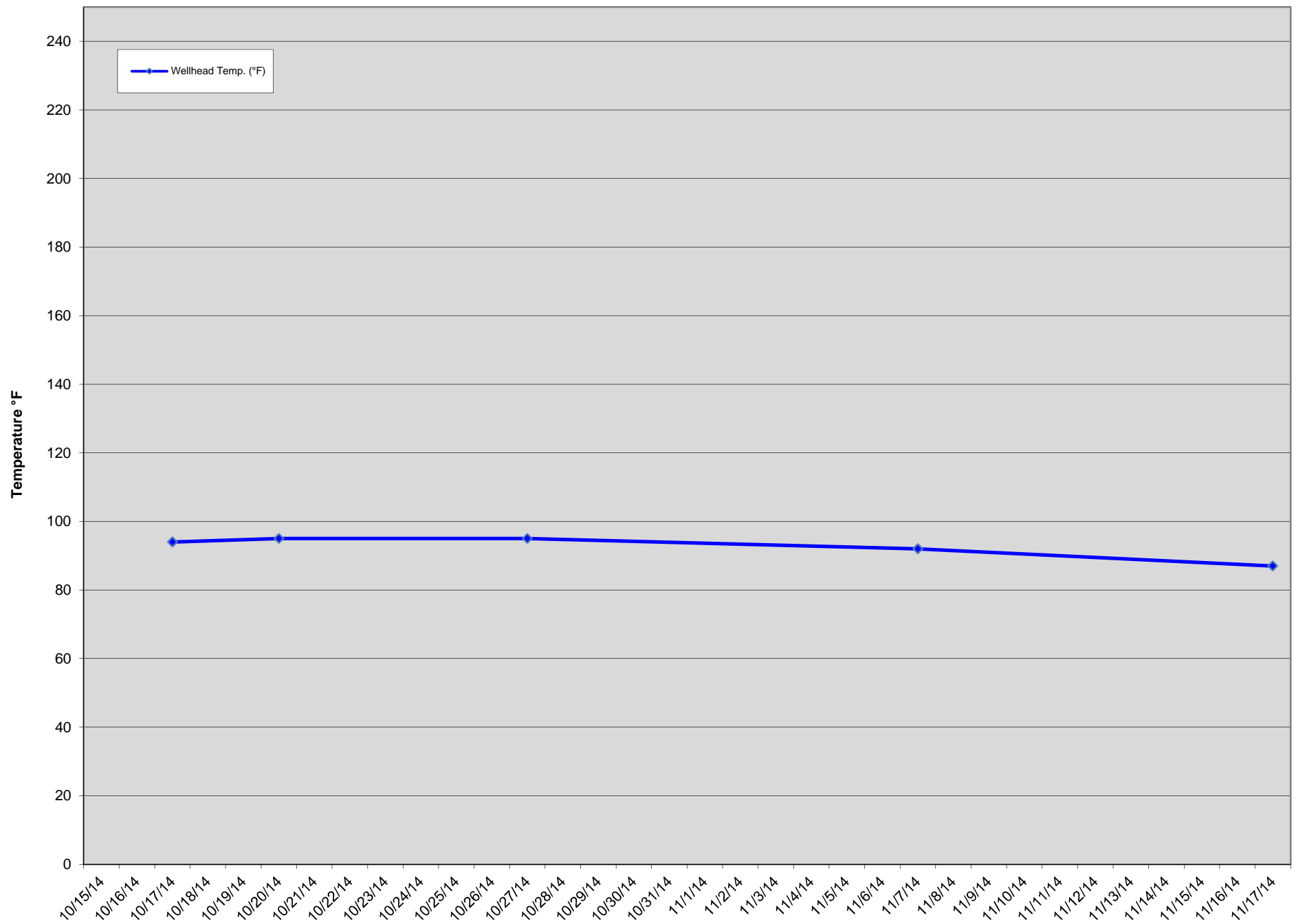
GEW-38 Wellhead Temperatures



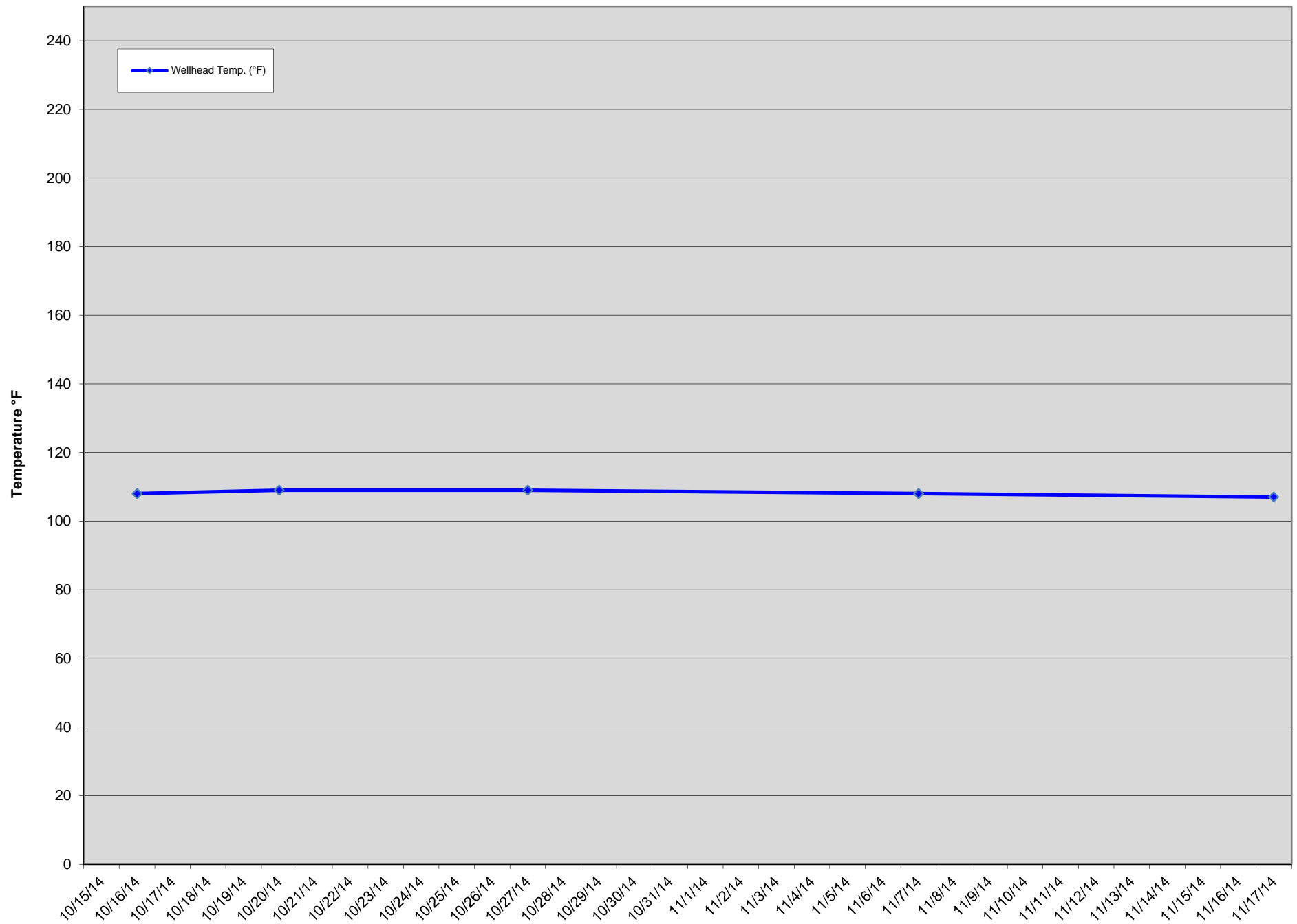
GEW-39 Wellhead Temperatures



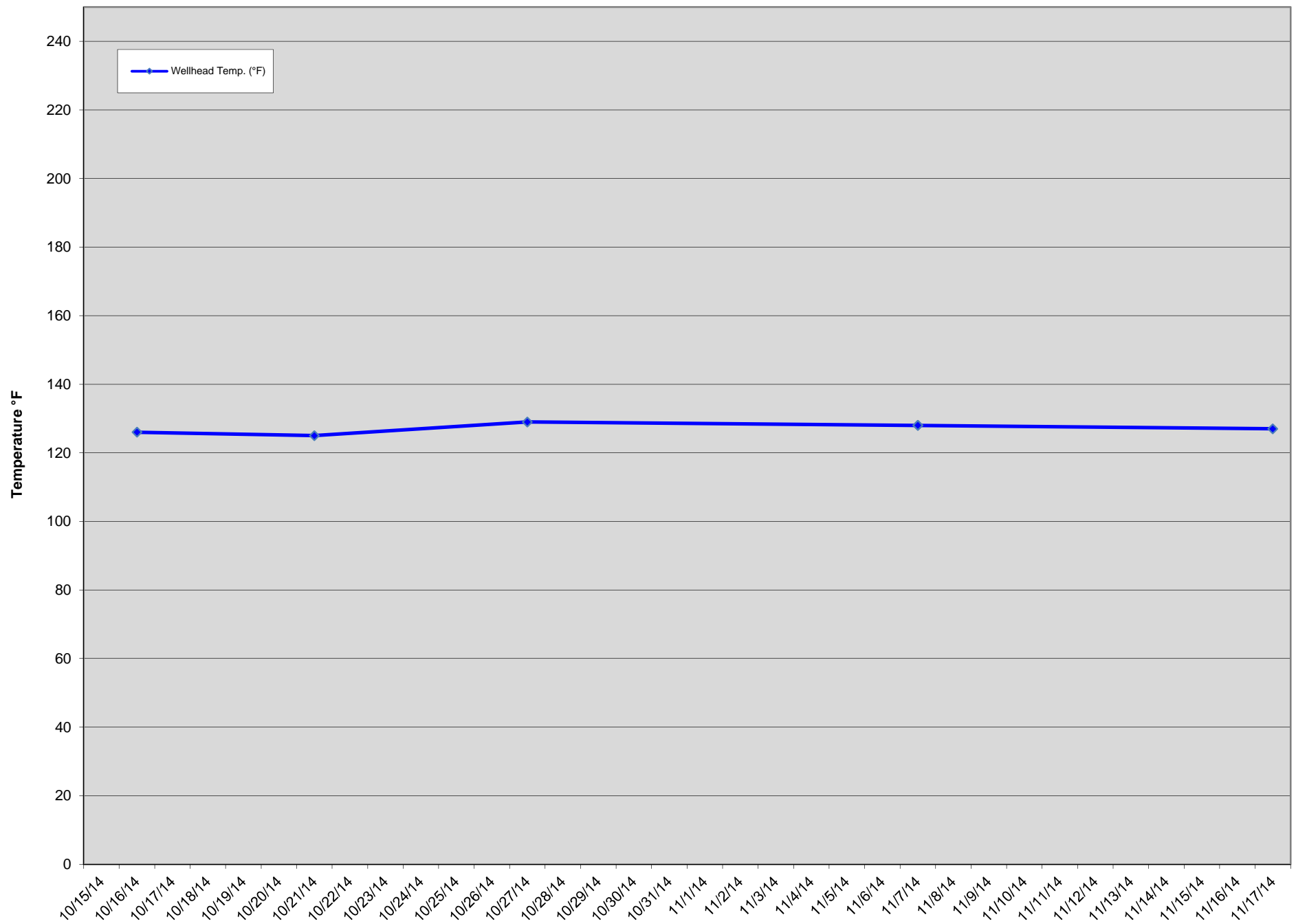
GEW-40 Wellhead Temperatures



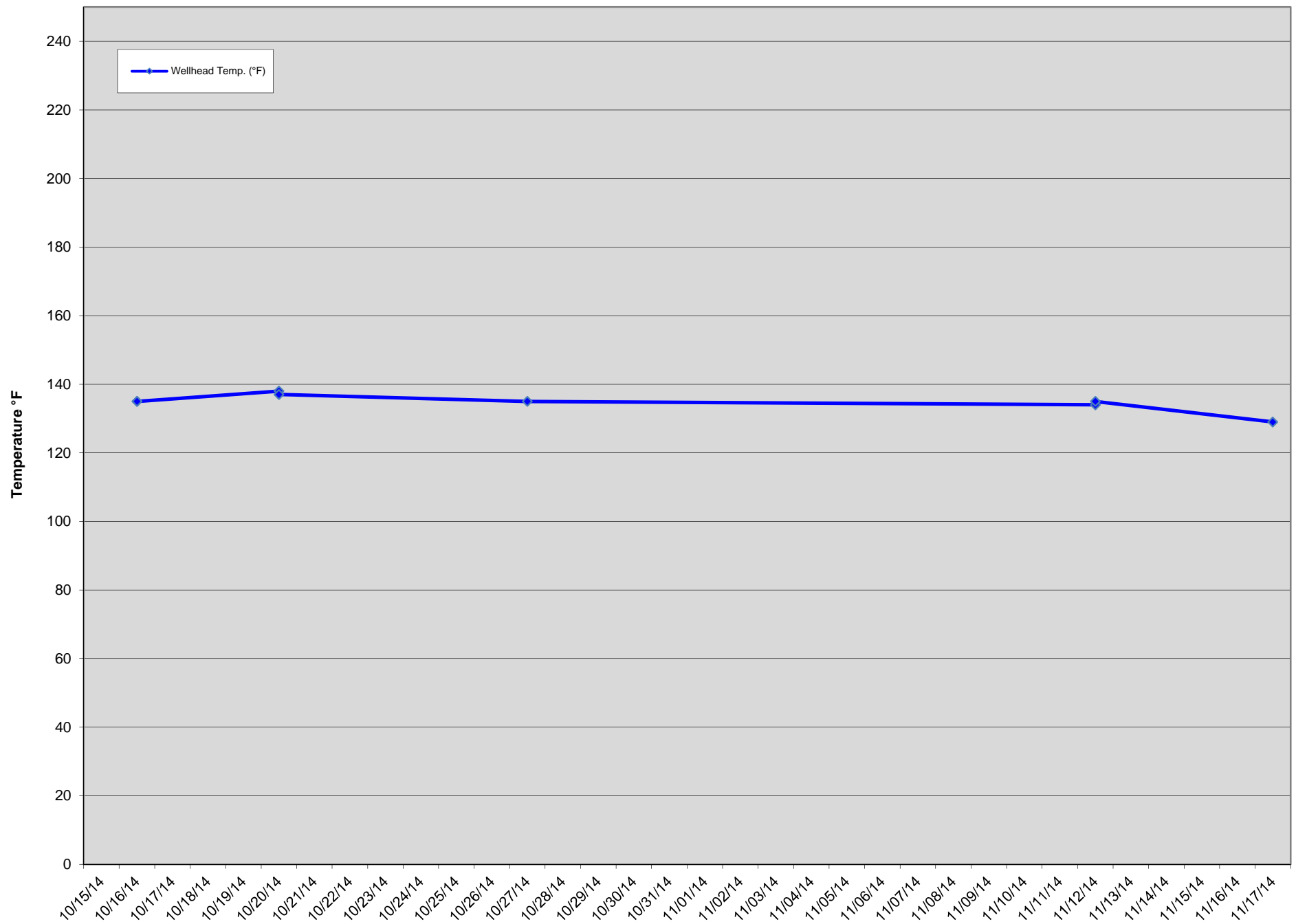
GEW-41R Wellhead Temperatures



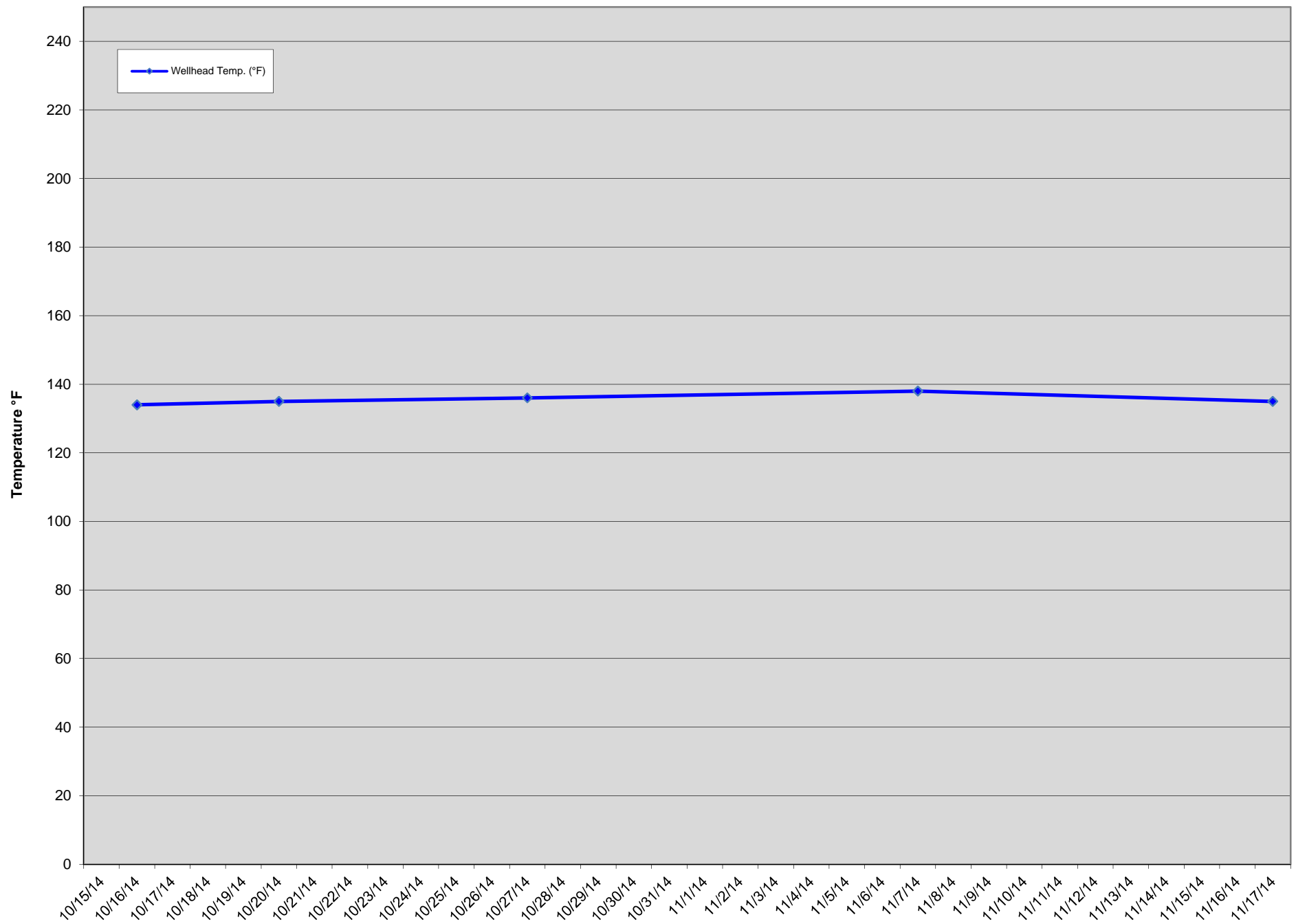
GEW-43R Wellhead Temperatures



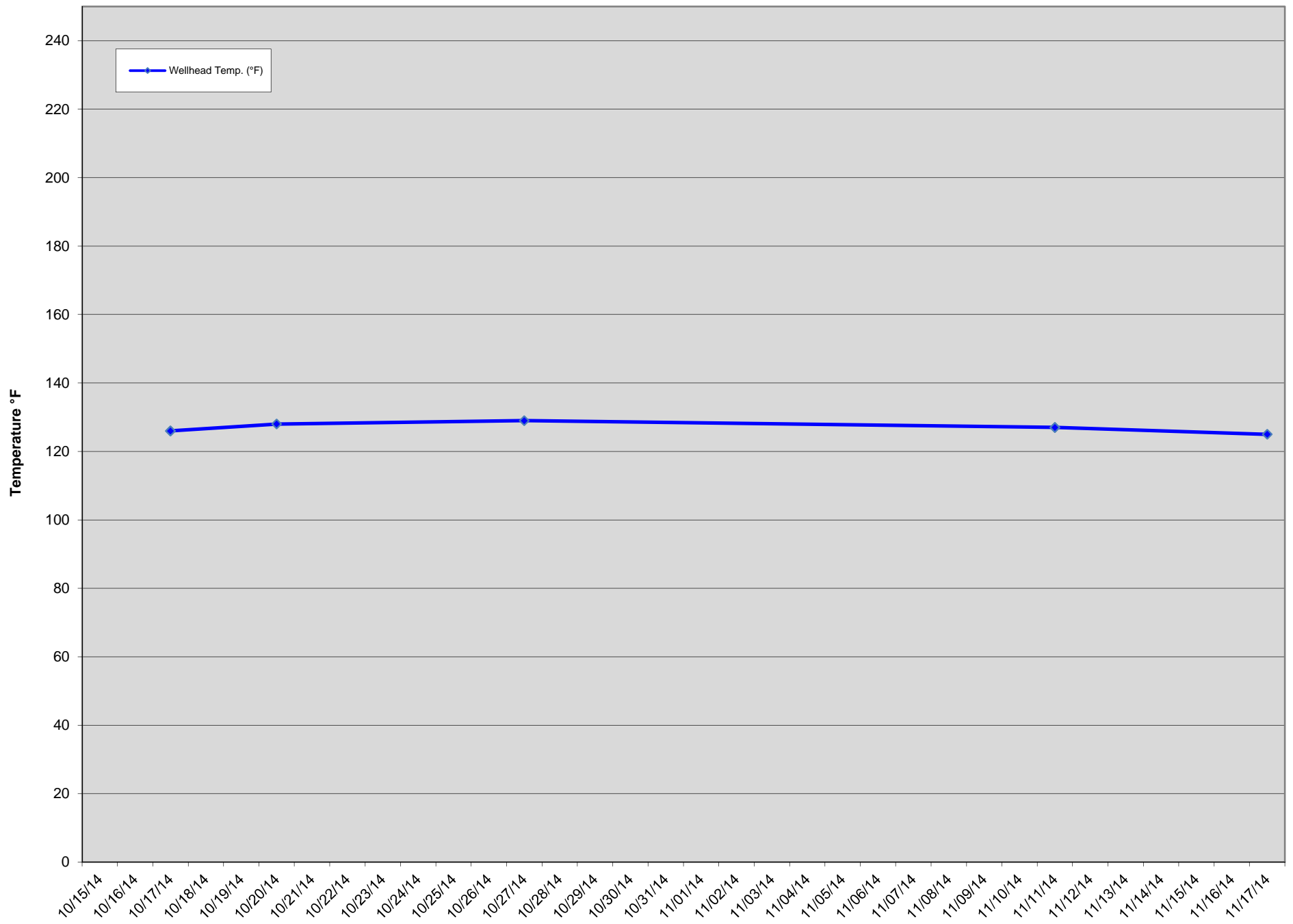
GEW-53 Wellhead Temperatures



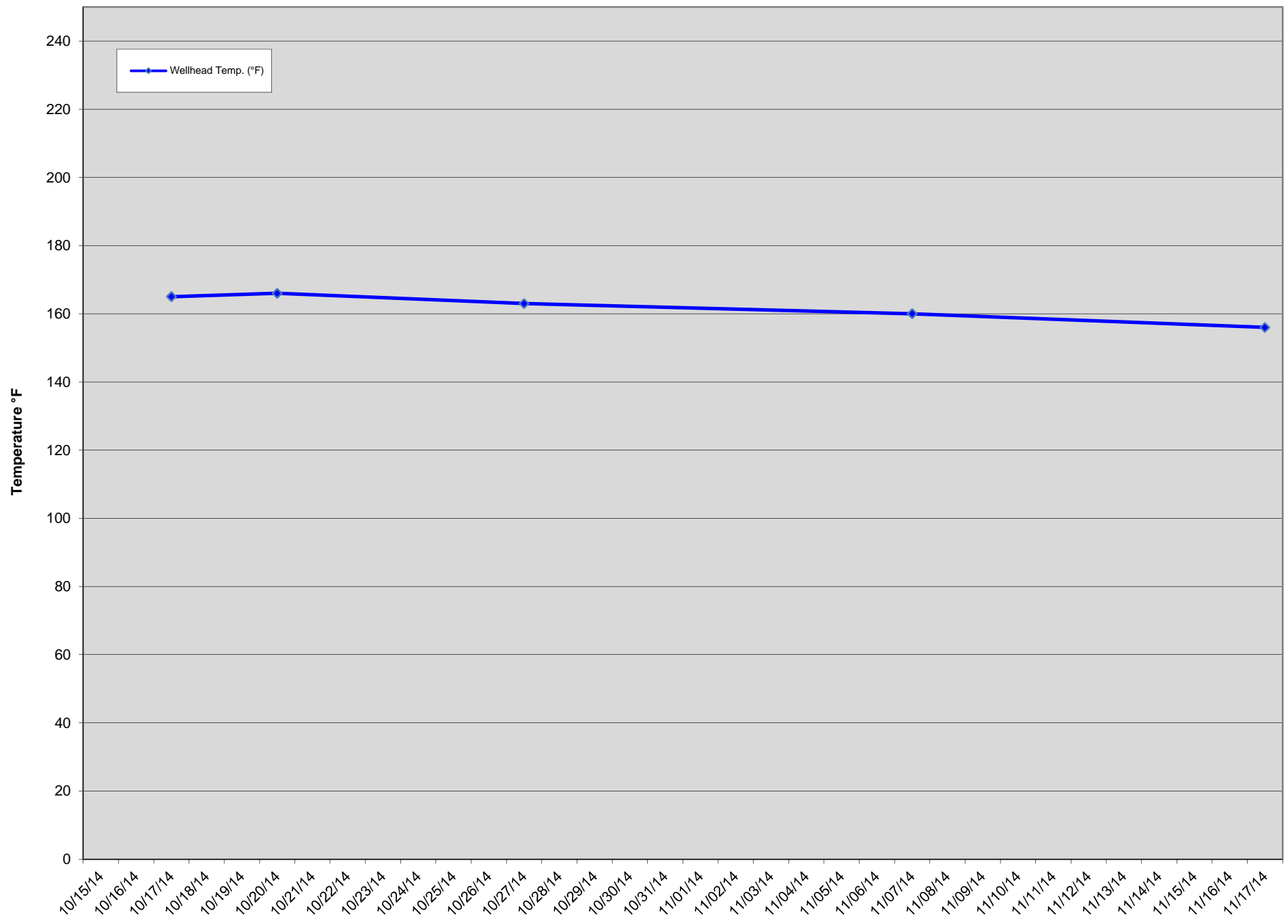
GEW-54 Wellhead Temperatures



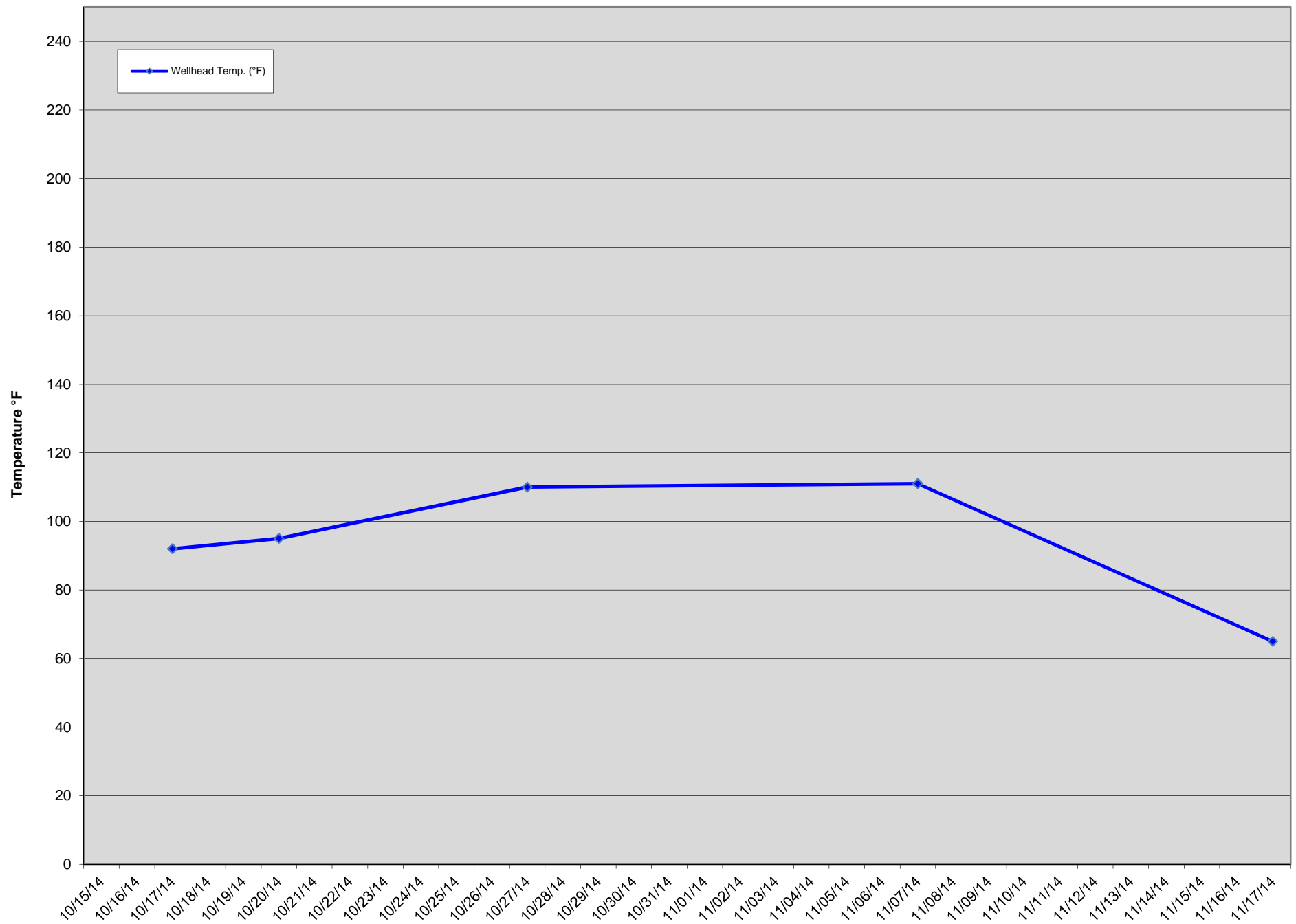
GEW-55 Wellhead Temperatures



GEW-56R Wellhead Temperatures



GEW-109 Wellhead Temperatures



GEW-110 Wellhead Temperatures

