

# **Bridgeton Landfill, LLC**

## **Weekly Data Submittals**

**Week of November 30 – December 6, 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**

**December 12, 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, -14, -16, -17, and -18. However, it should be noted that the 18-foot interval in TMP-11 increased slightly in the latest reading. In addition, the 40-foot interval sensor in TMP-9 was deemed reliable and its data was added back to the data set.

TMP-5, -7, -7R, -12, -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 (GIWs) (GIW-2 through GIW-7, as well as GIW-10). Wellhead gas temperatures in these wells are all in the low to mid 40-50°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, gas 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**

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 all 14 wells were monitored and all well temperatures are consistent in comparison to prior weeks.

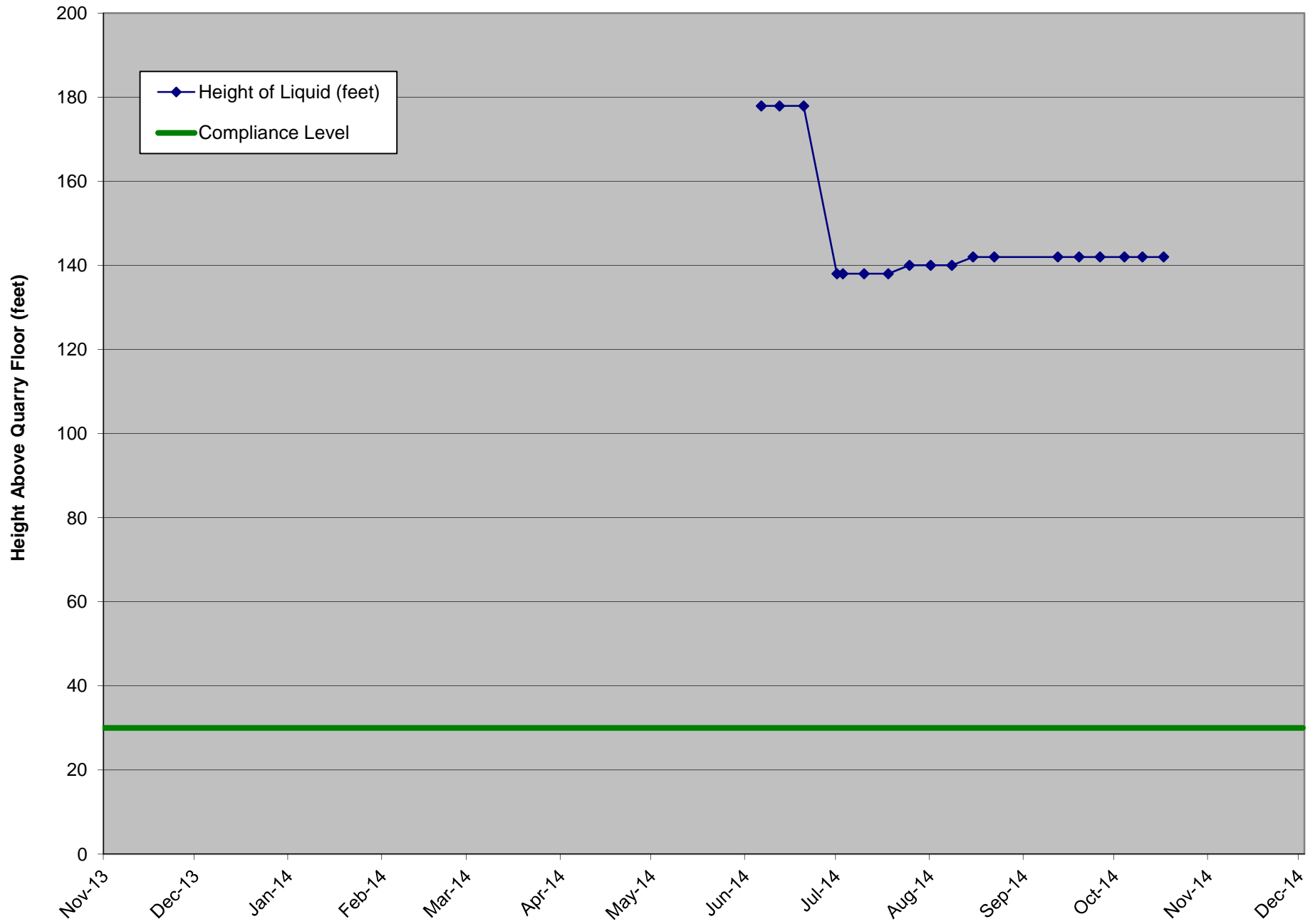
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**ATTACHMENT A**

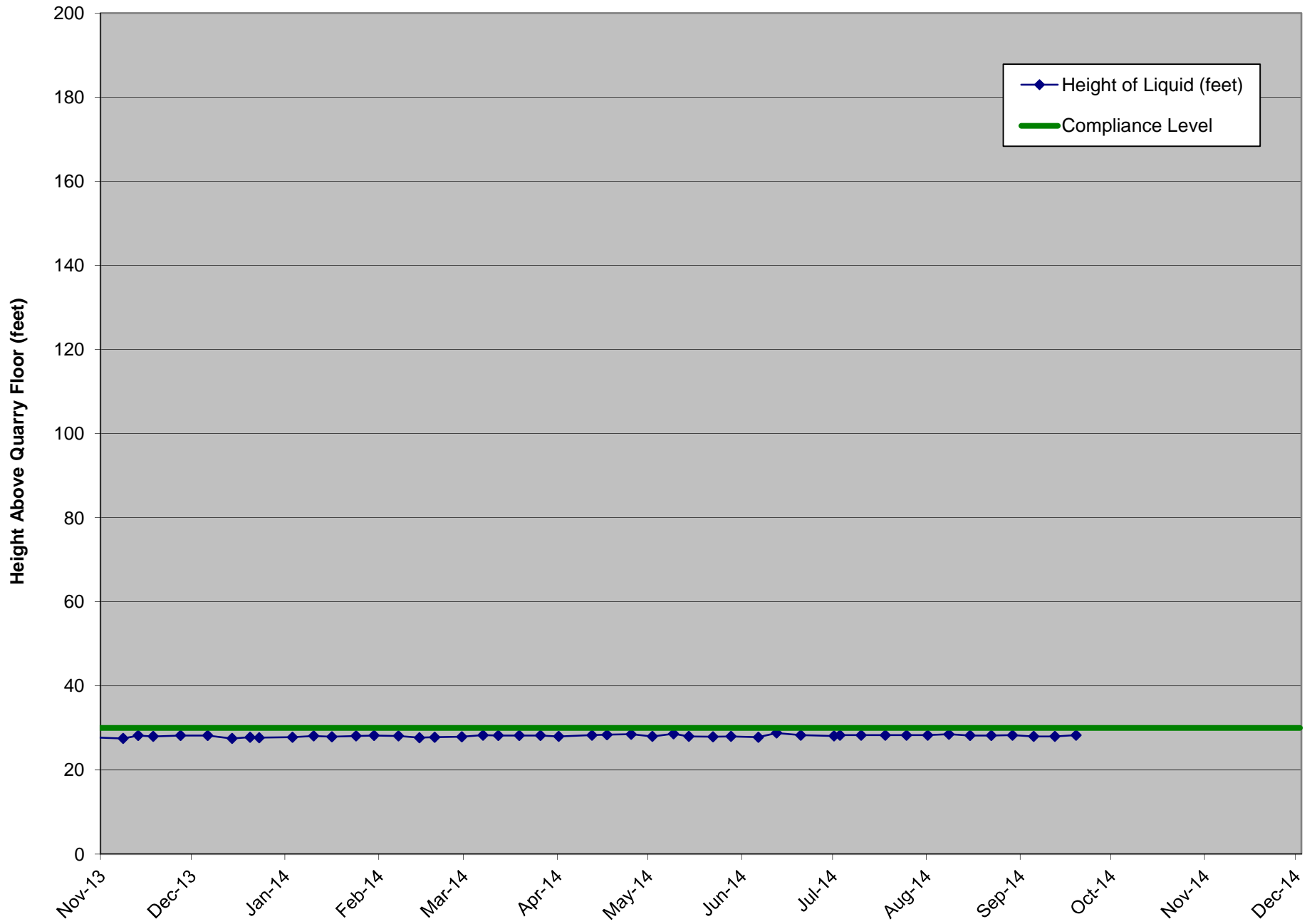
**LEACHATE LEVELS IN LEACHATE COLLECTION SUMPS**

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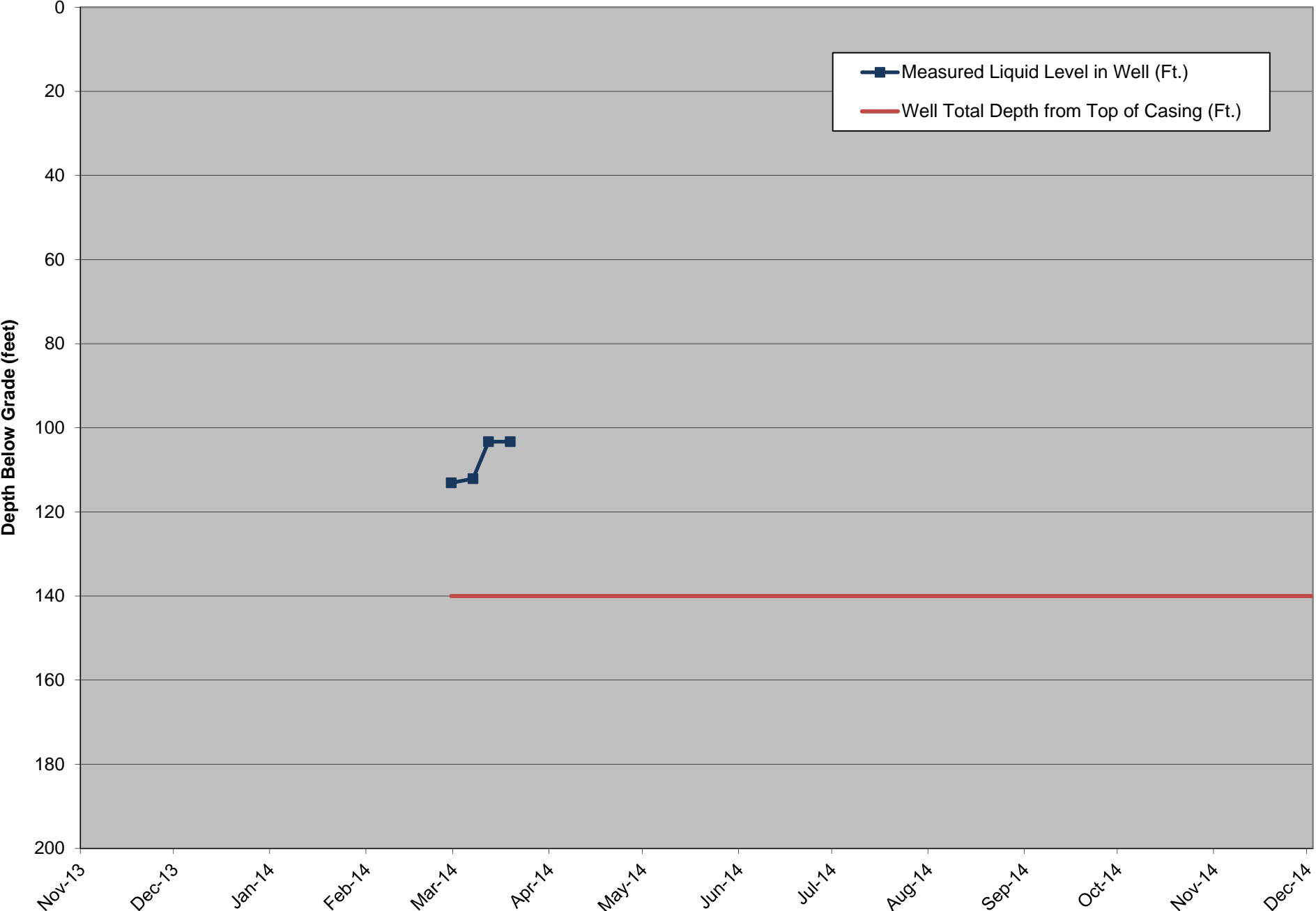
### LCS-1D Liquid Level Above Quarry Floor



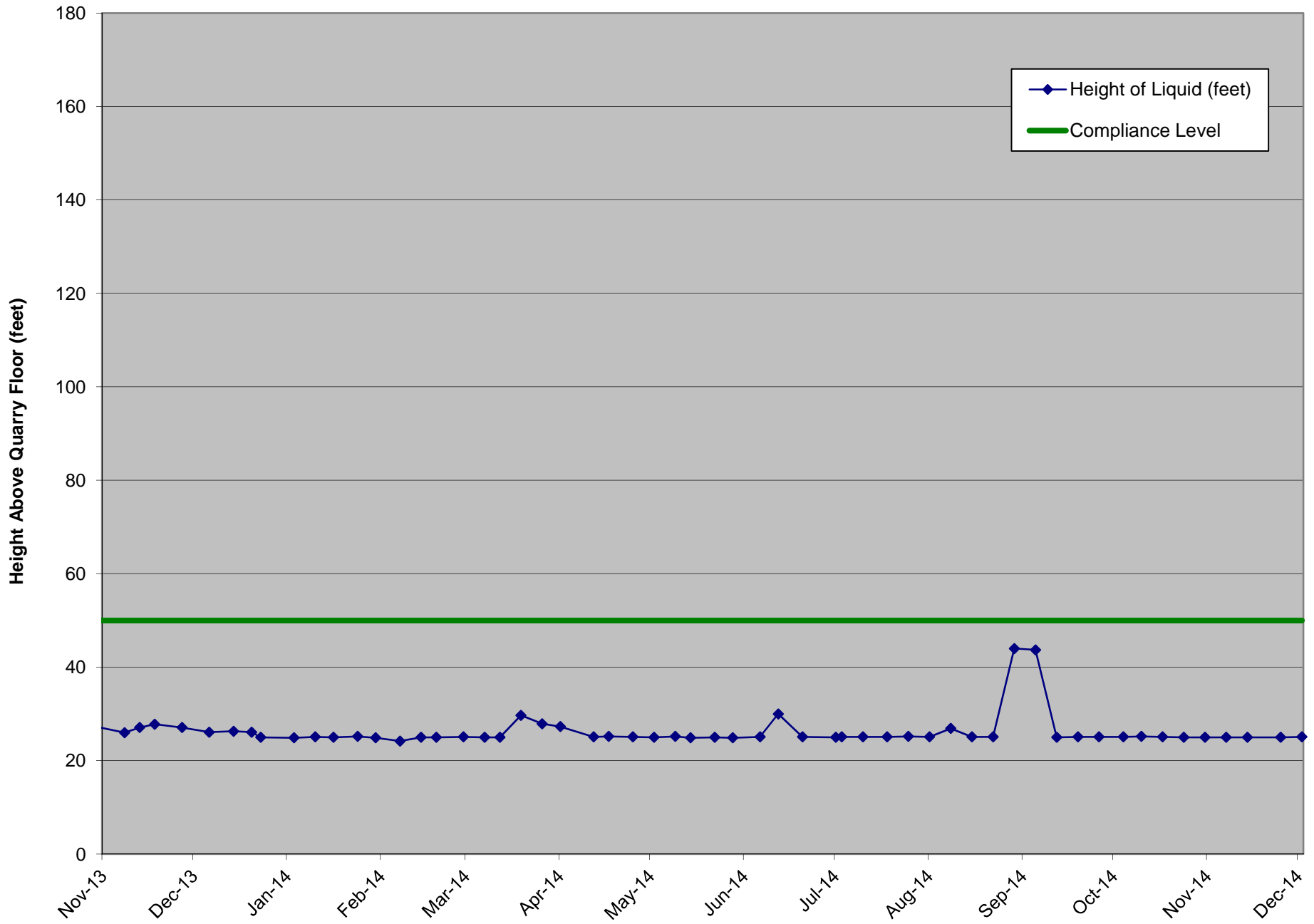
### LCS-2D Liquid Level Above Quarry Floor



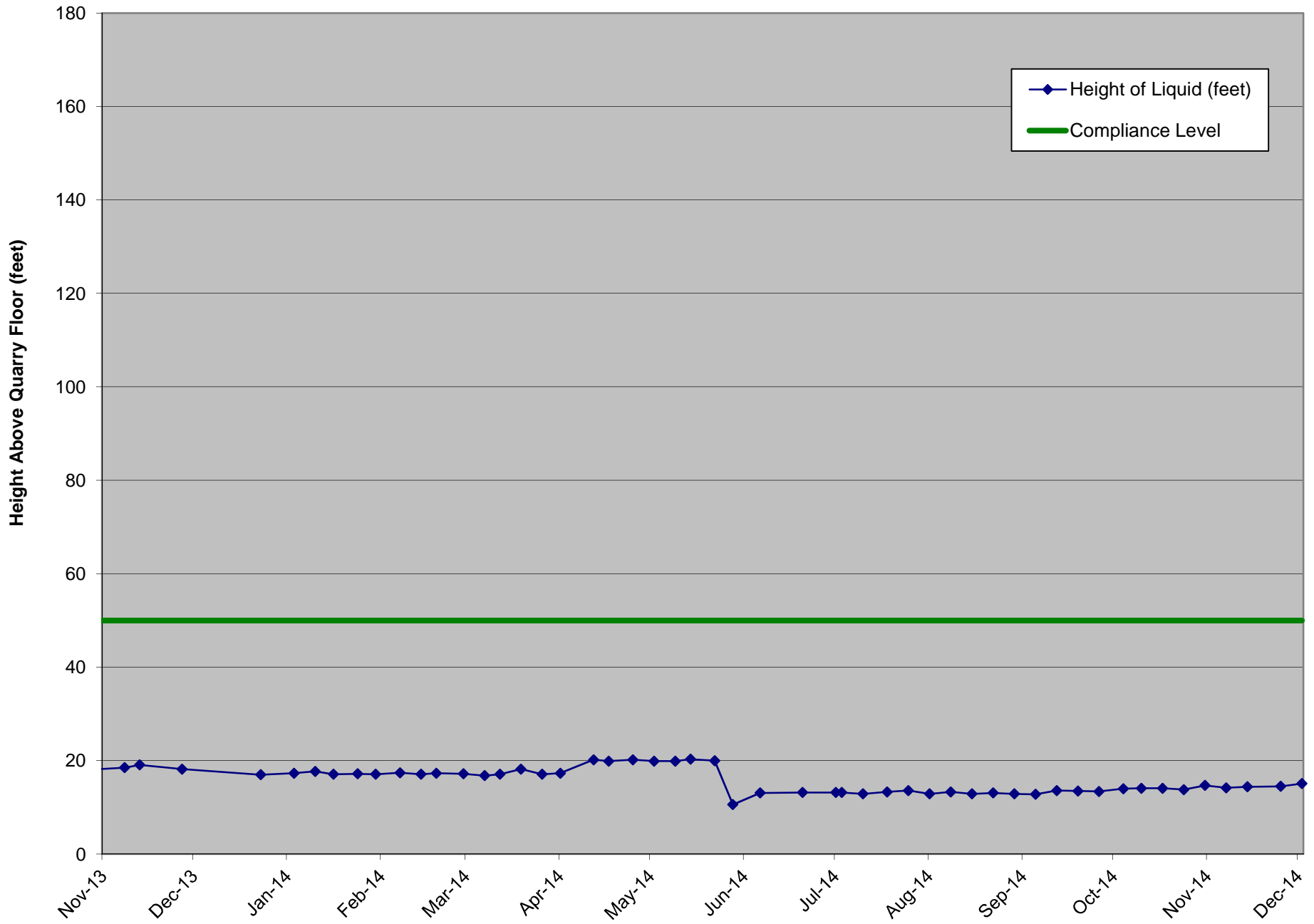
### LCS-3D Liquid Level Below Ground Surface



### LCS-5A Liquid Level Above Quarry Floor



### LCS-6B Liquid Level Above Quarry Floor





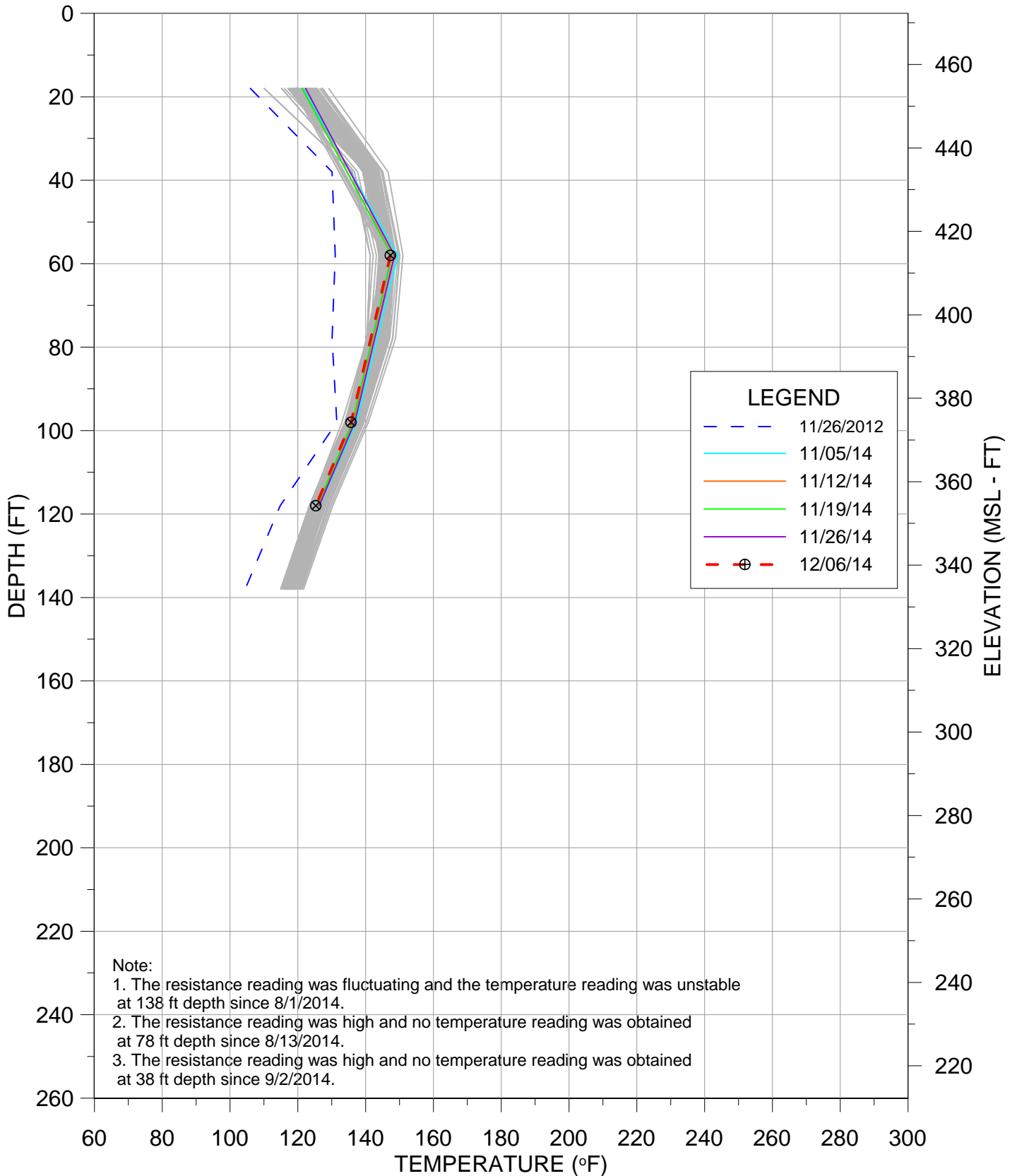
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**ATTACHMENT B**

**TEMPERATURE MONITORING PROBE ANALYTICAL CHARTS**

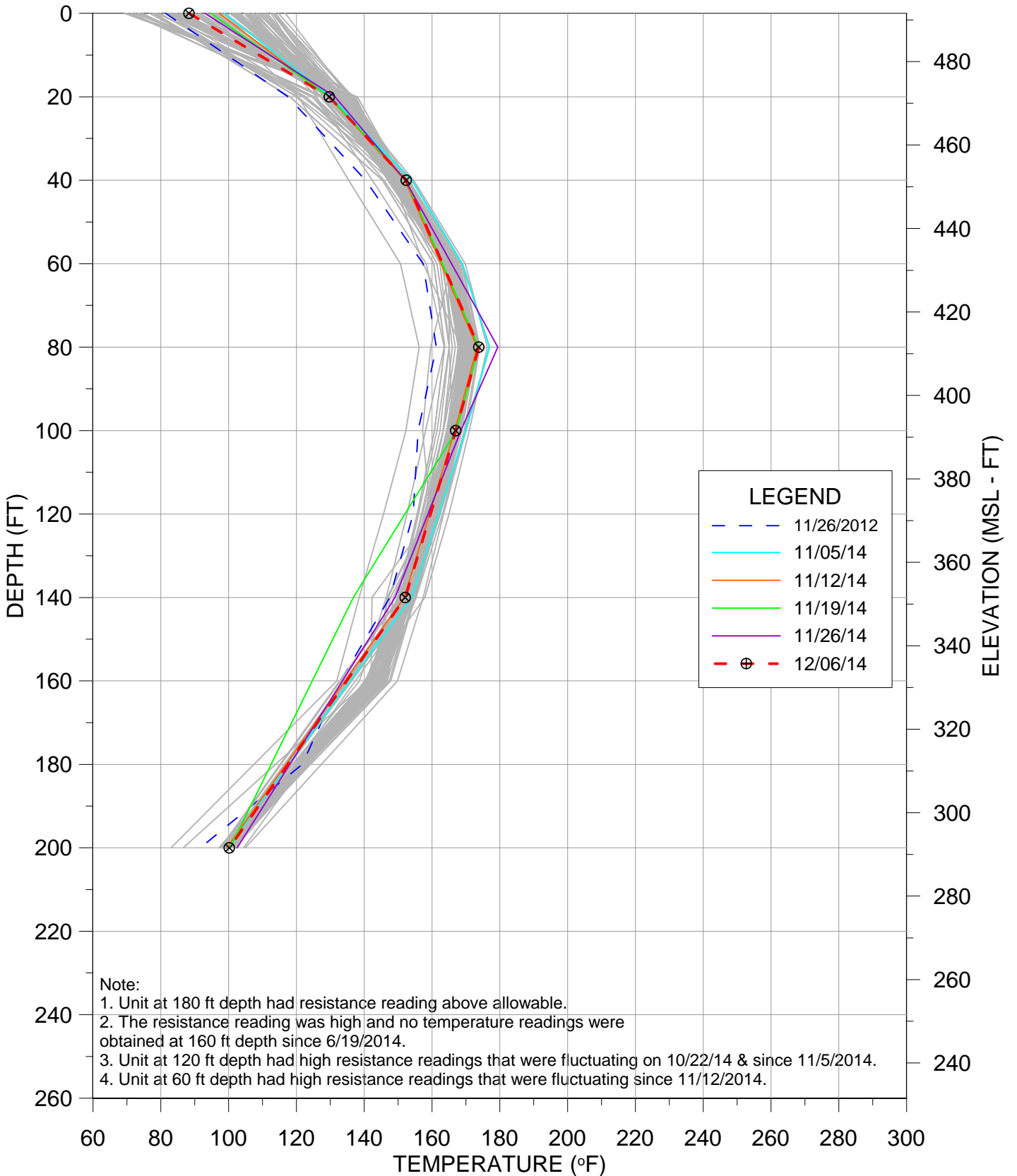
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# TMP-1



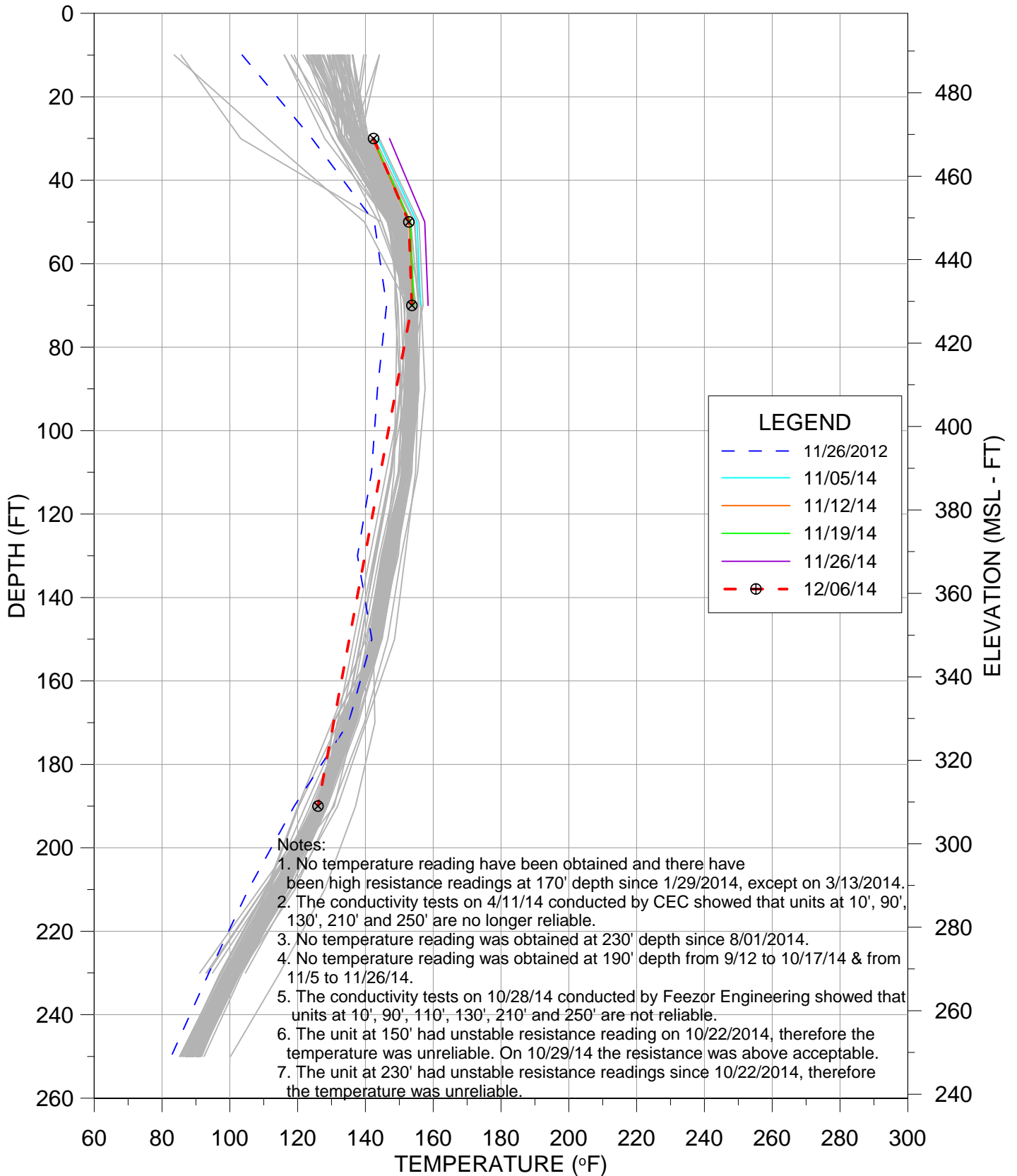
TEMPERATURE VS DEPTH  
BRIDGETON LANDFILL

# TMP-2



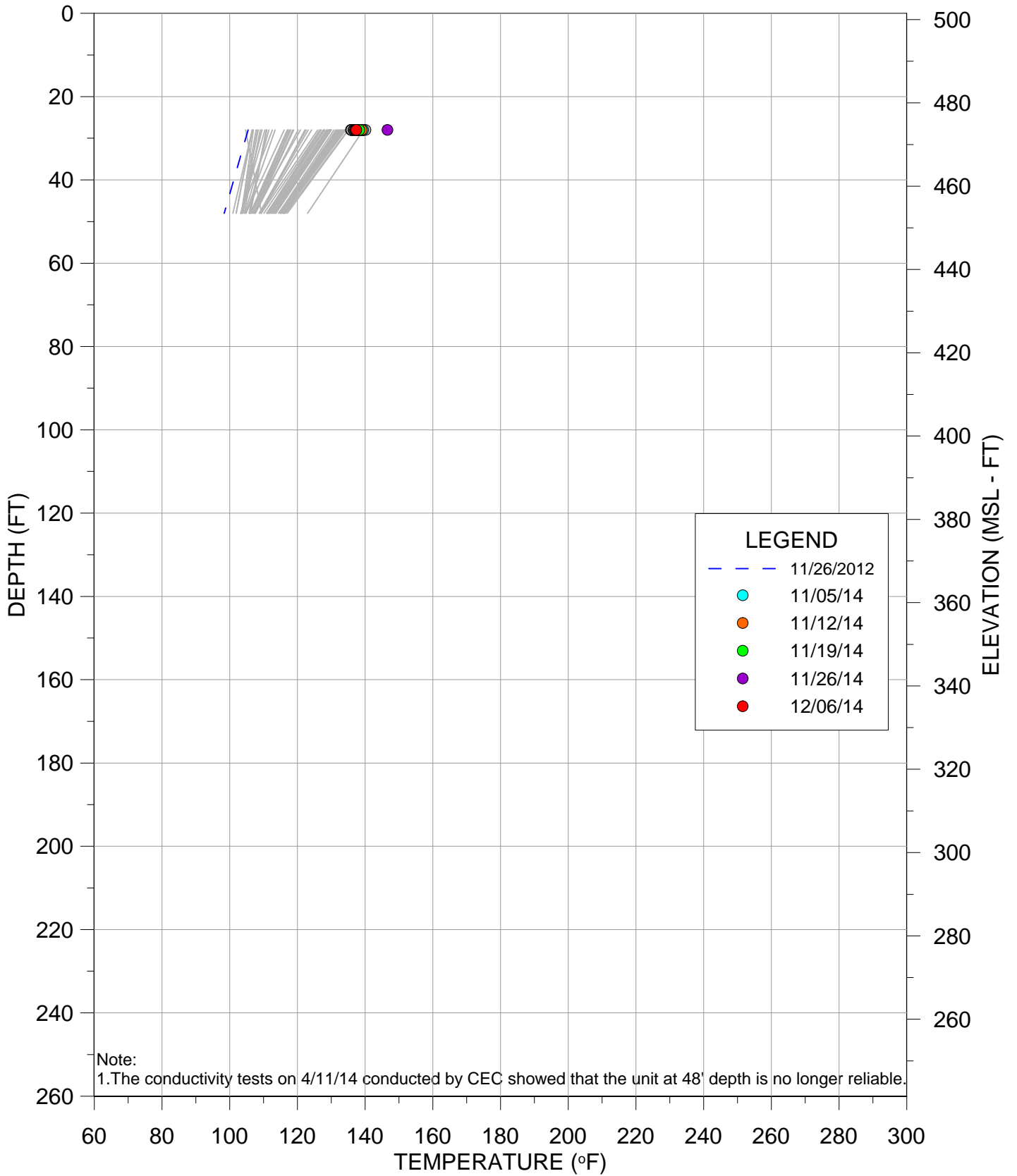
TEMPERATURE VS DEPTH  
BRIDGETON LANDFILL

# TMP-3



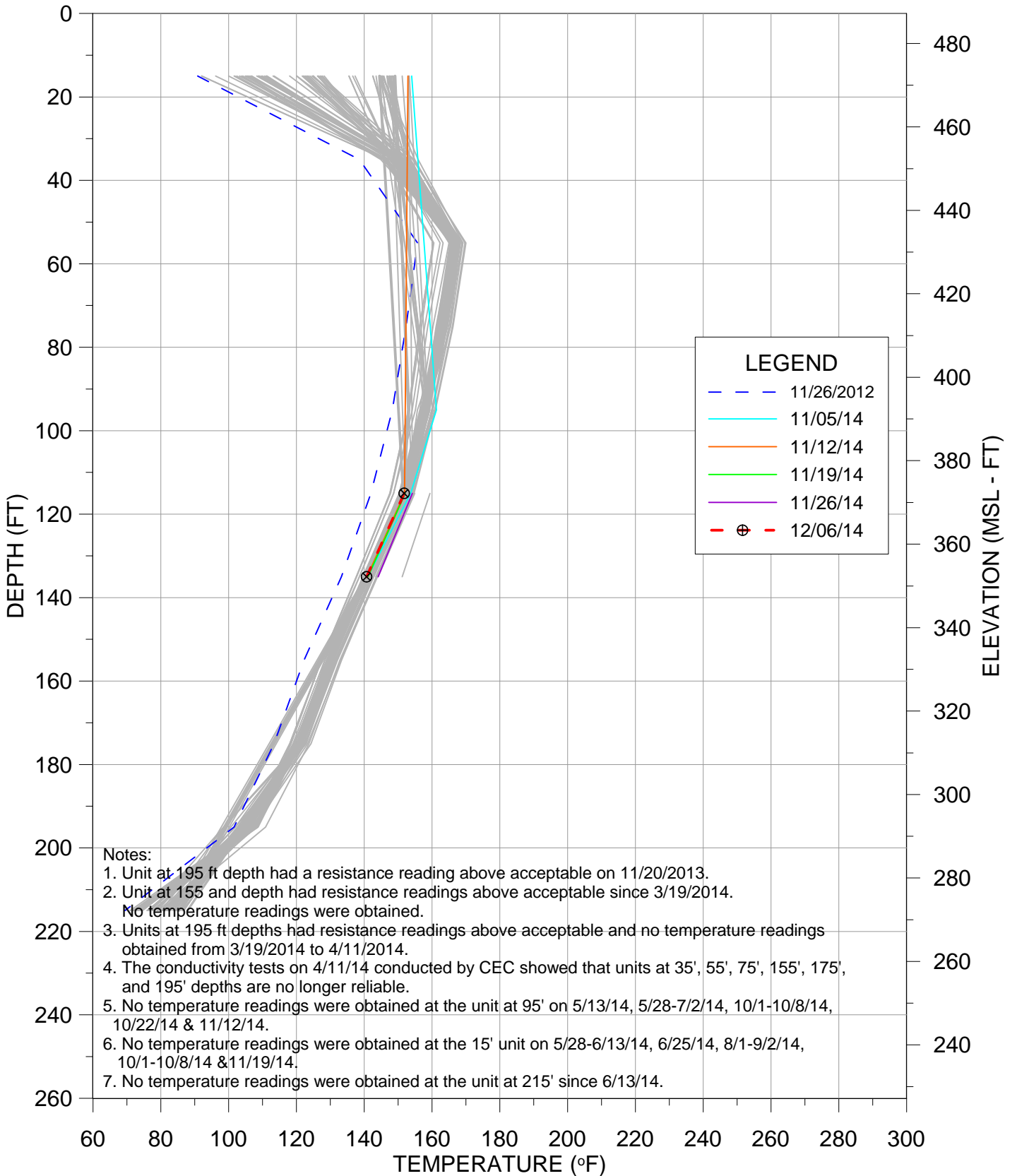
TEMPERATURE VS DEPTH  
BRIDGETON LANDFILL

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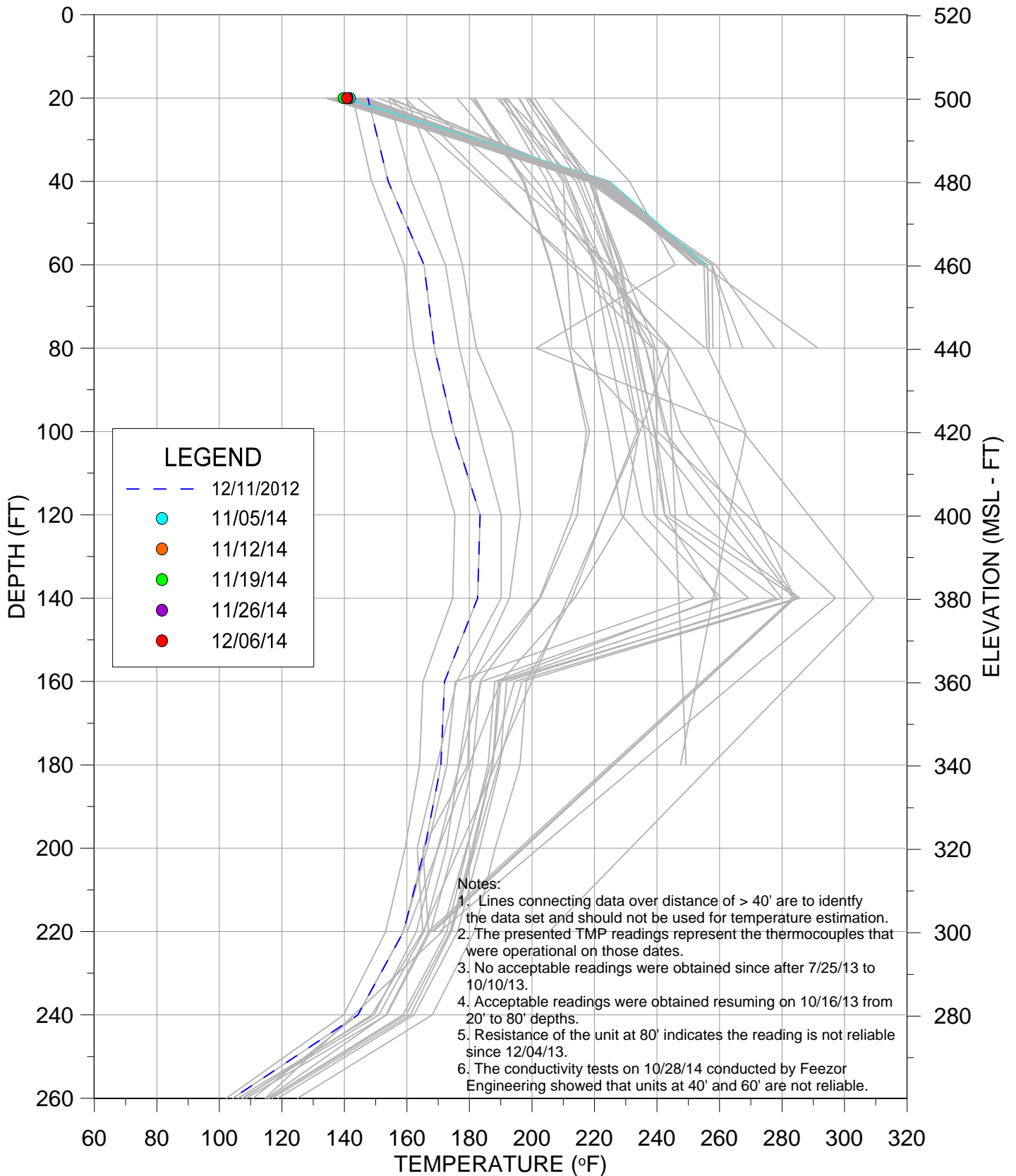
TEMPERATURE VS DEPTH  
BRIDGETON LANDFILL

# TMP-6



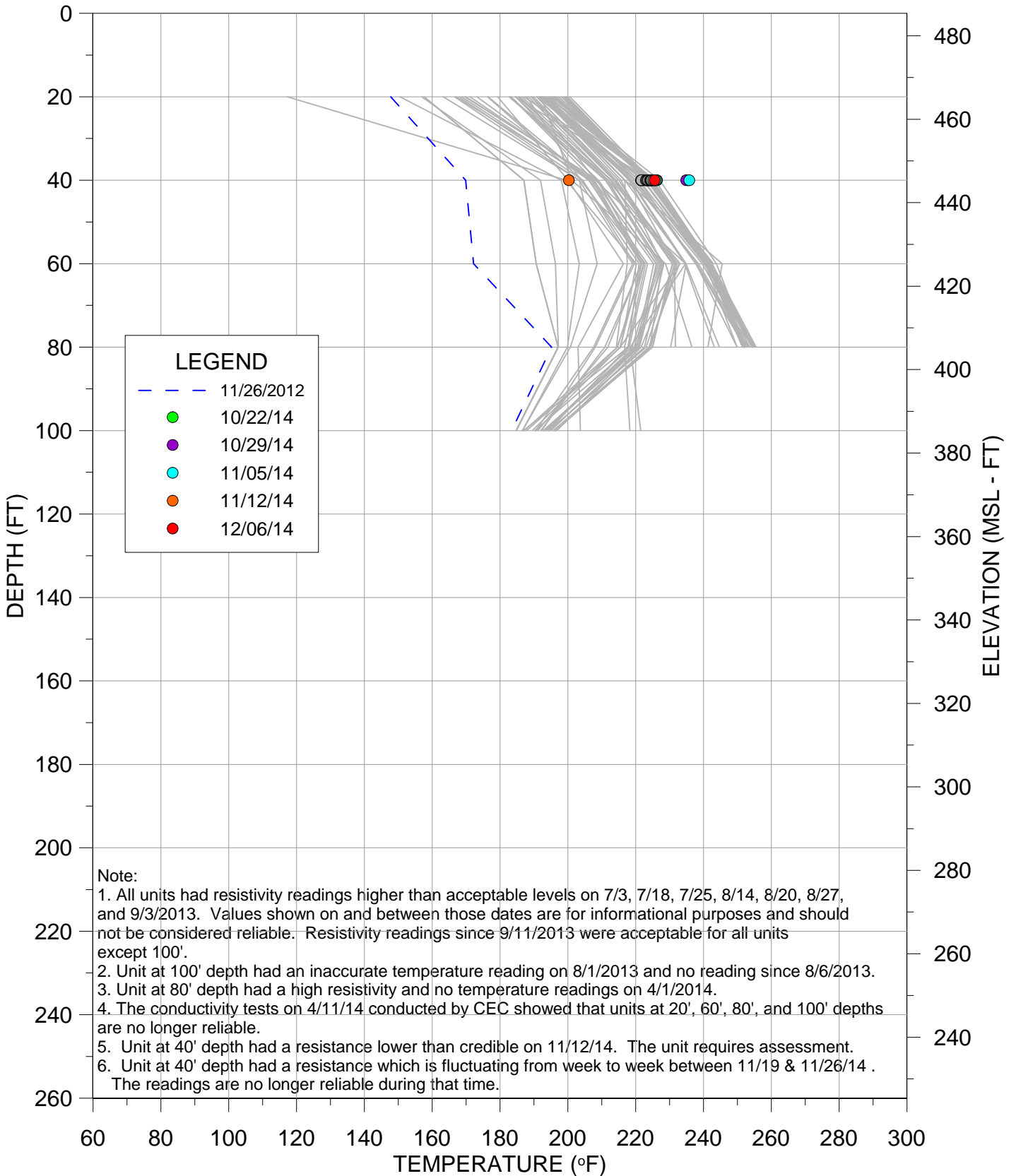
TEMPERATURE VS DEPTH  
BRIDGETON LANDFILL

# TMP-8



TEMPERATURE VS DEPTH  
BRIDGETON LANDFILL

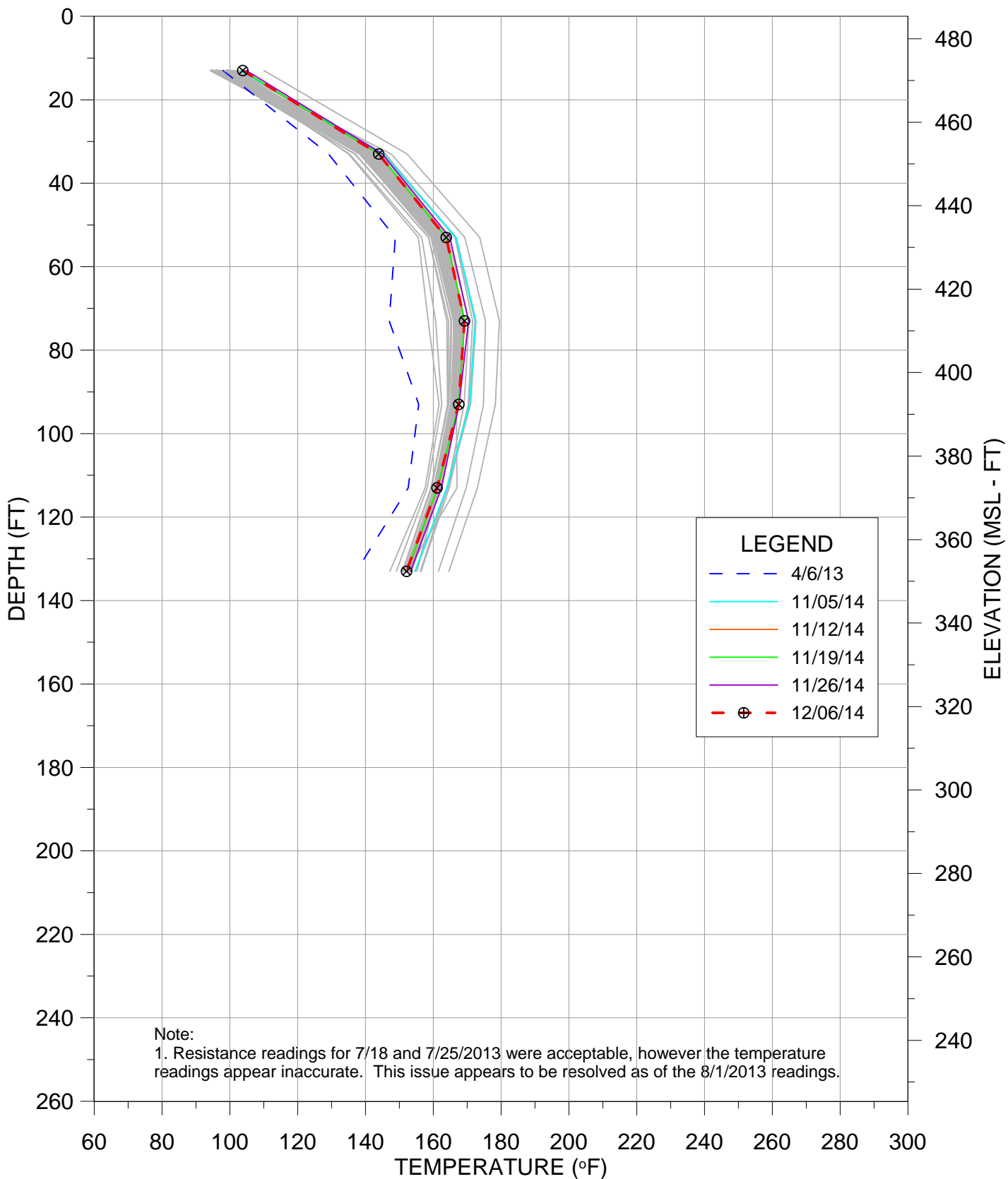
# TMP-9



TEMPERATURE VS DEPTH  
BRIDGETON LANDFILL

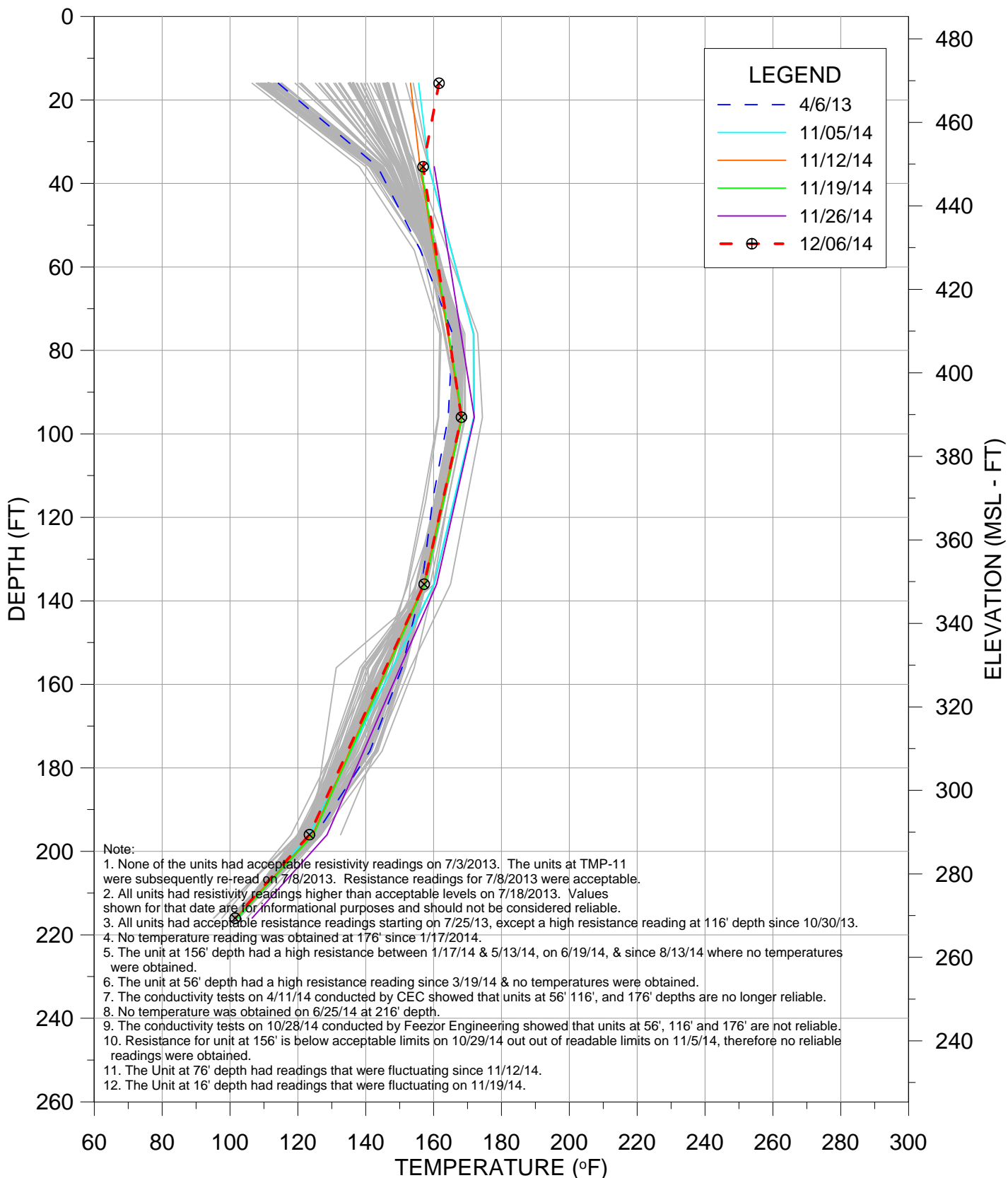


# TMP-10



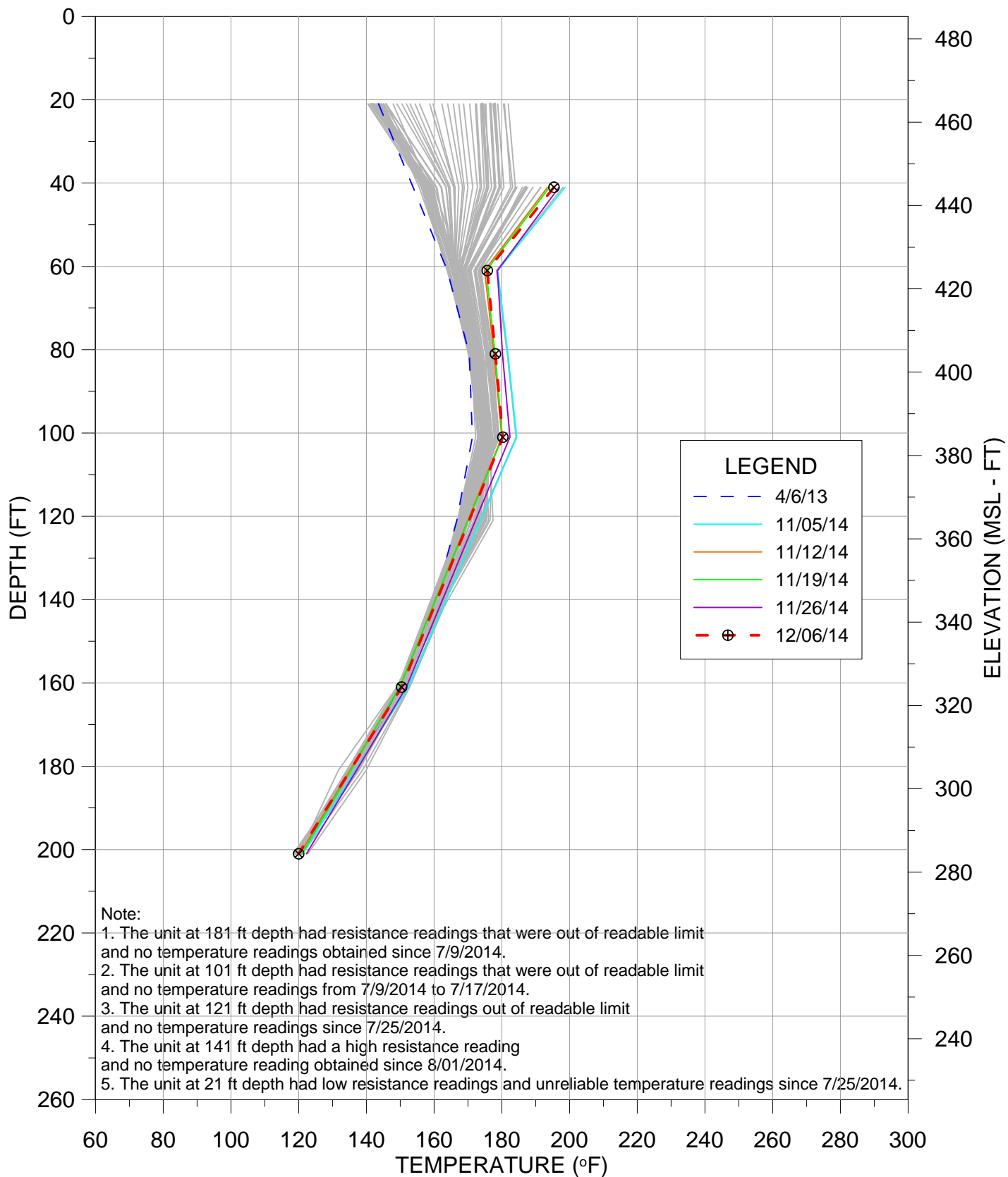
TEMPERATURE VS DEPTH  
BRIDGETON LANDFILL

# TMP-11



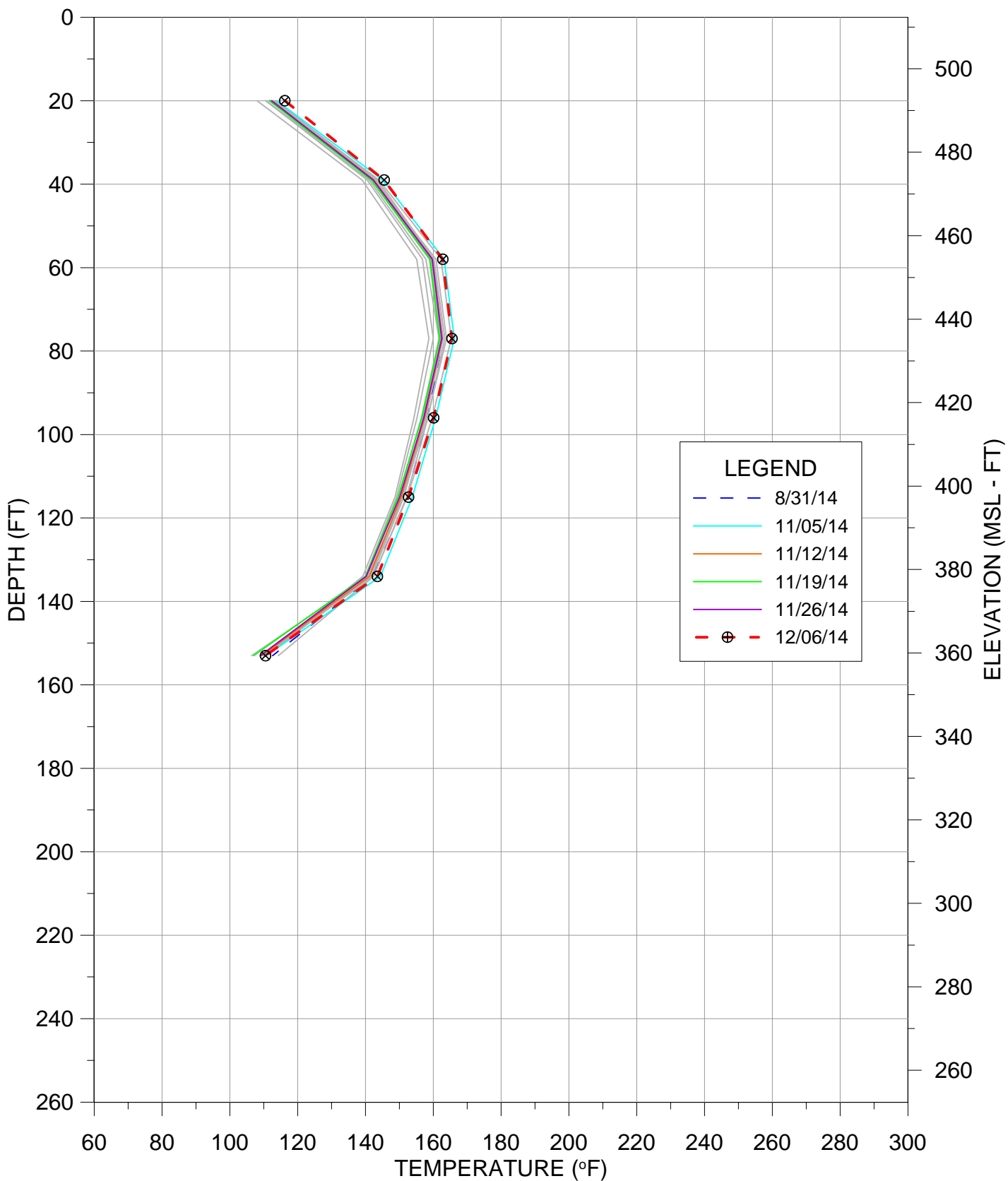
TEMPERATURE VS DEPTH  
BRIDGETON LANDFILL

# TMP-14



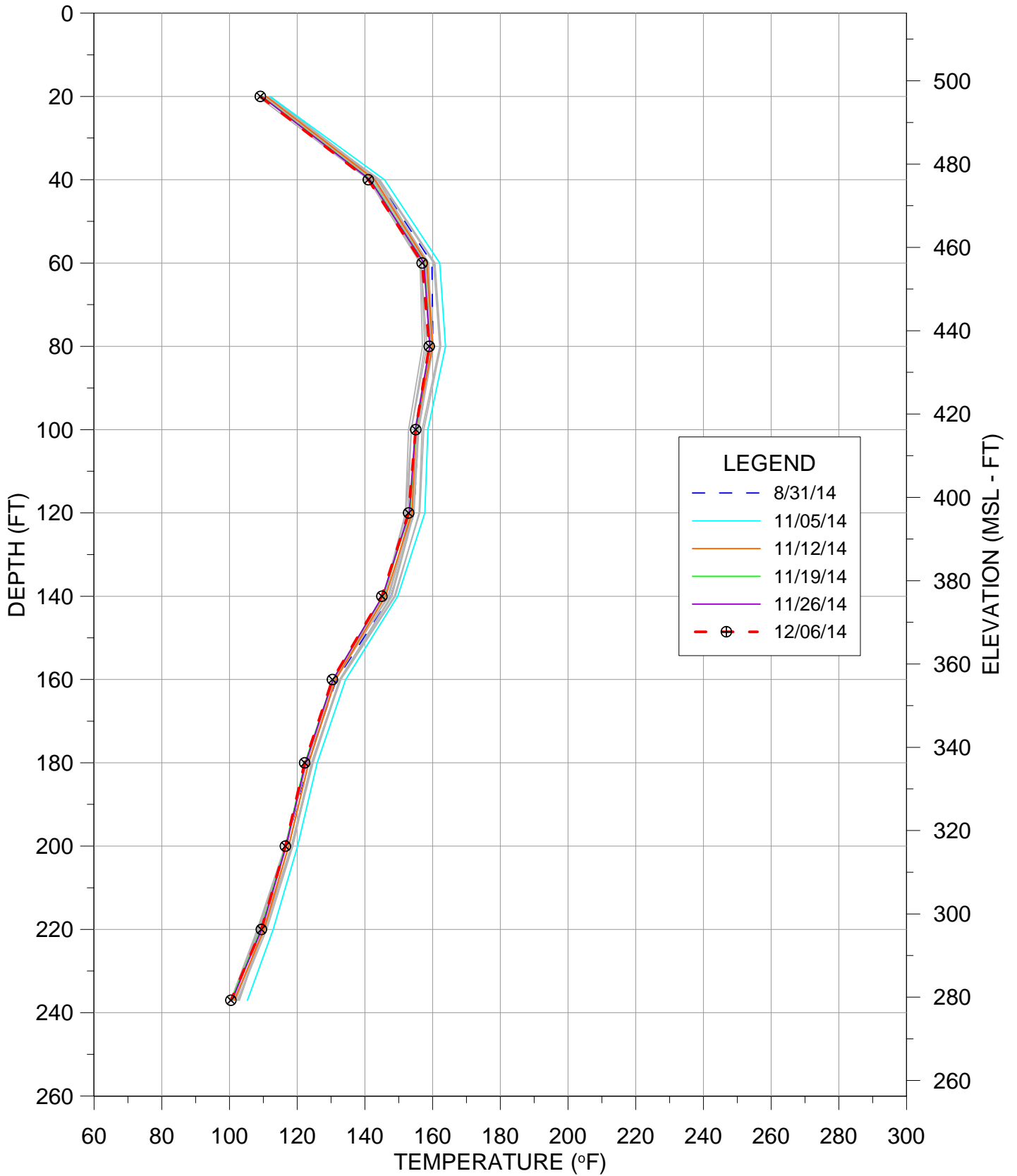
TEMPERATURE VS DEPTH  
BRIDGETON LANDFILL

# TMP-16



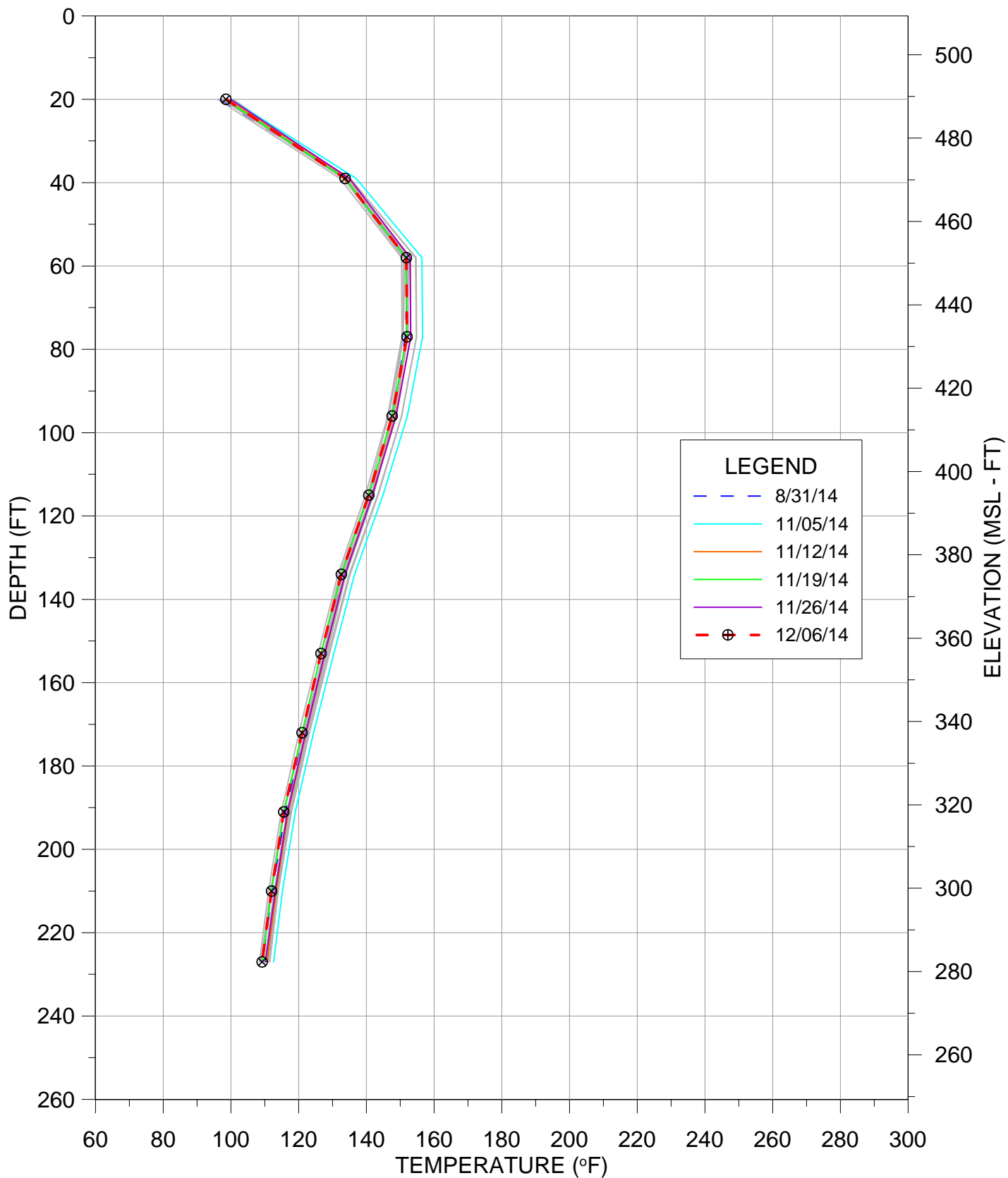
TEMPERATURE VS DEPTH  
BRIDGETON LANDFILL

# TMP-17



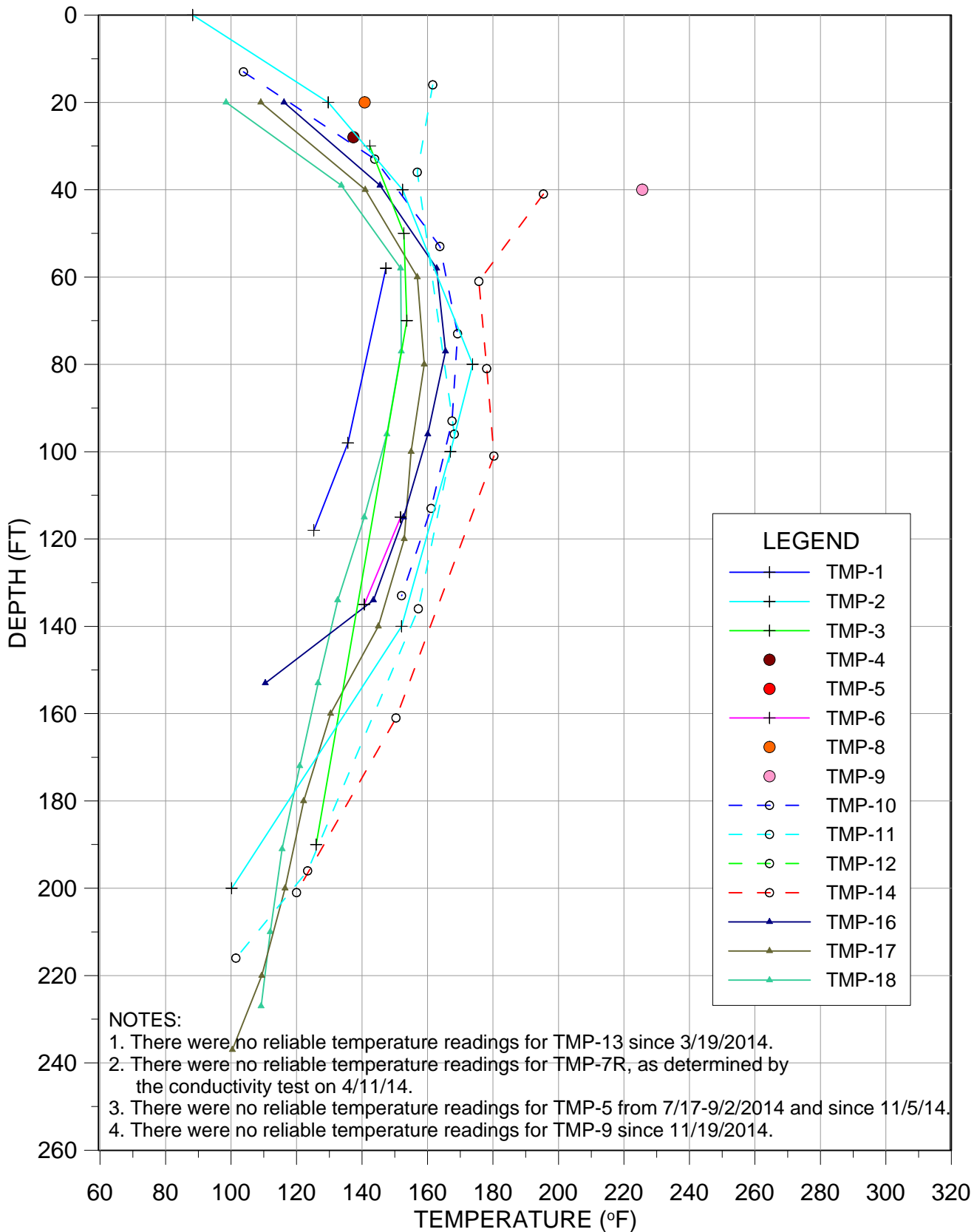
TEMPERATURE VS DEPTH  
BRIDGETON LANDFILL

# TMP-18



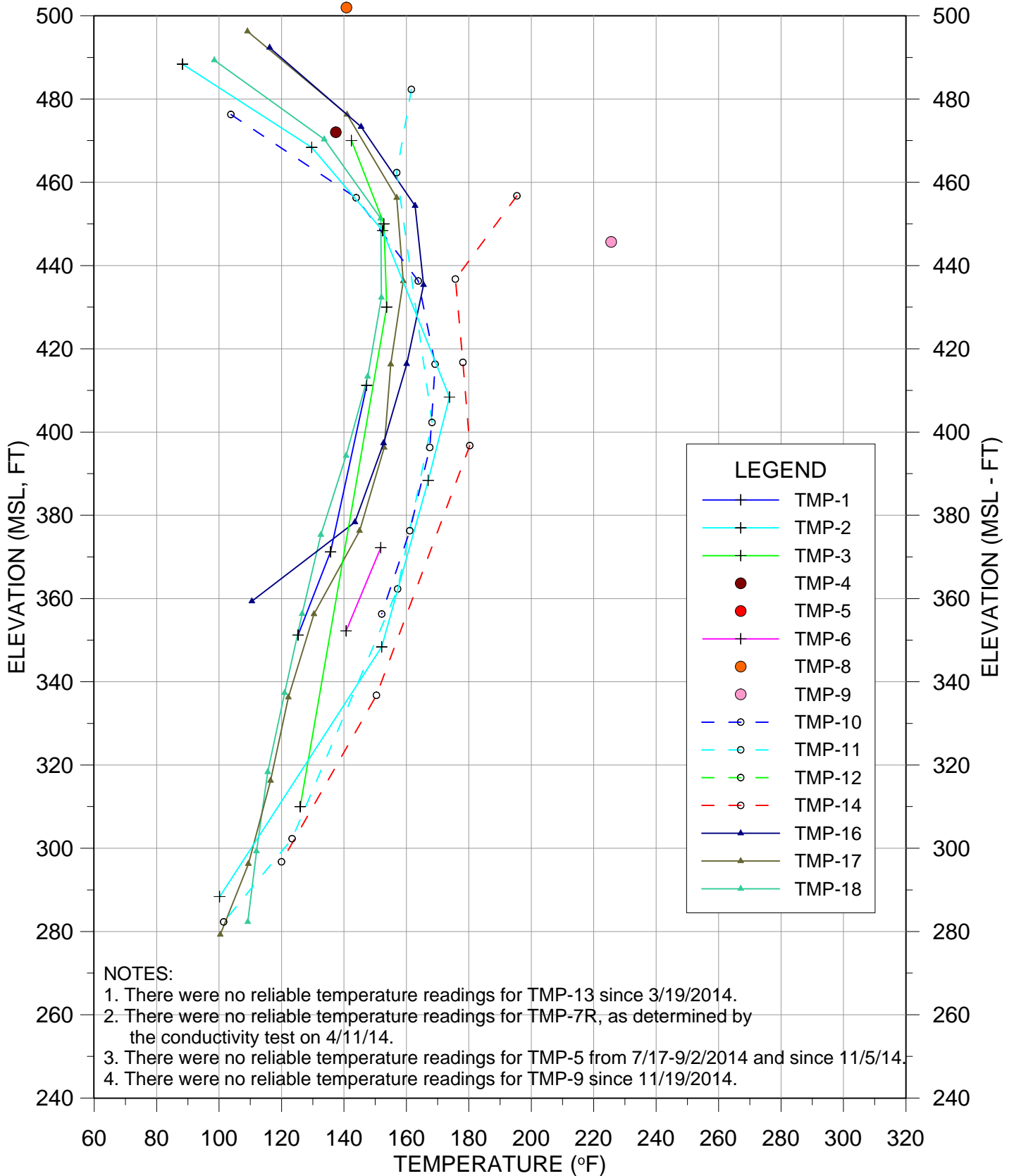
TEMPERATURE VS DEPTH  
BRIDGETON LANDFILL

# 12/6/2014 -DEPTH



TEMPERATURE VS DEPTH  
BRIDGETON LANDFILL

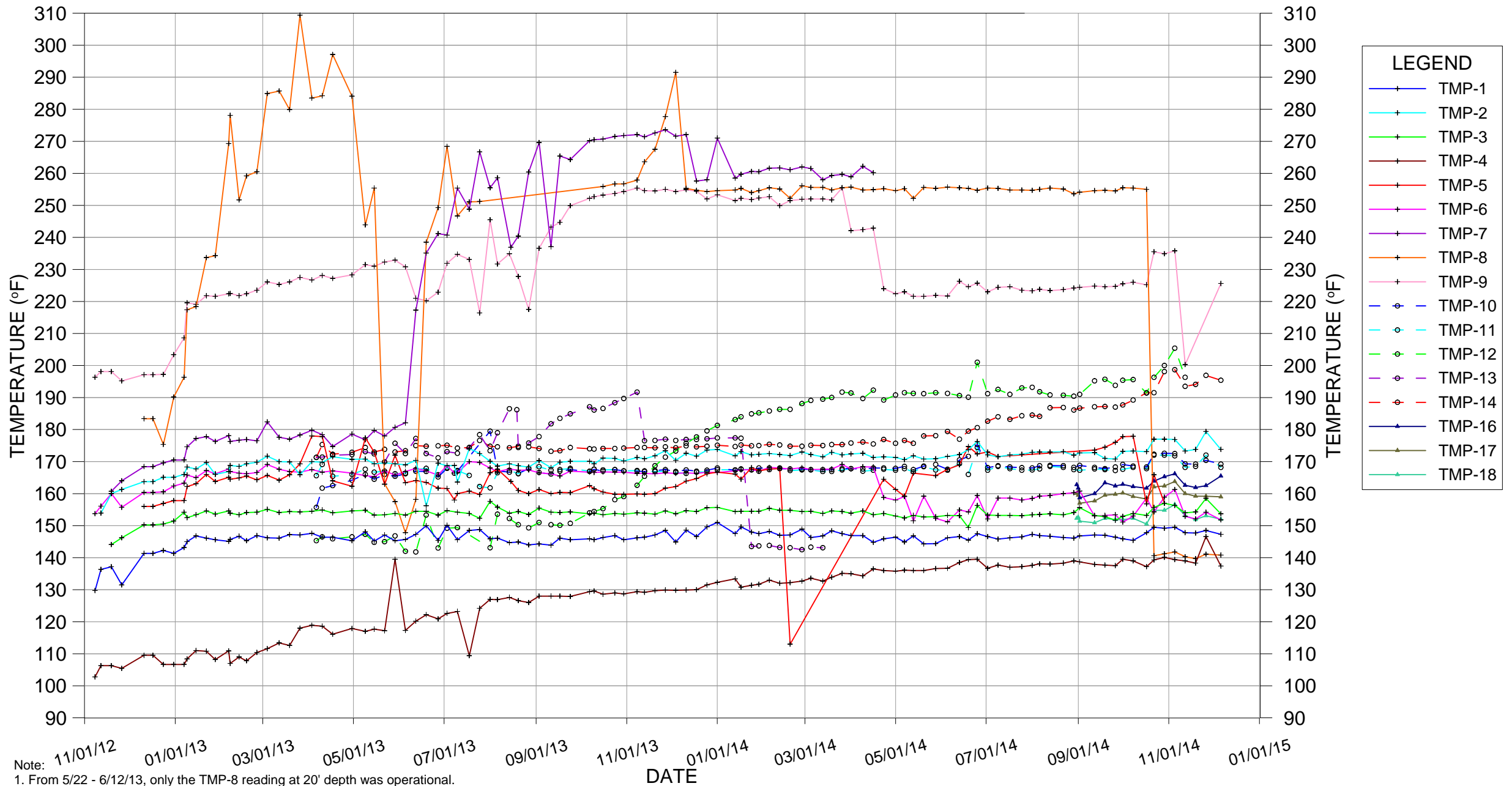
# 12/6/2014 - ELEVATION



TEMPERATURE VS ELEVATION  
BRIDGETON LANDFILL



# MAXIMUM TEMPERATURES

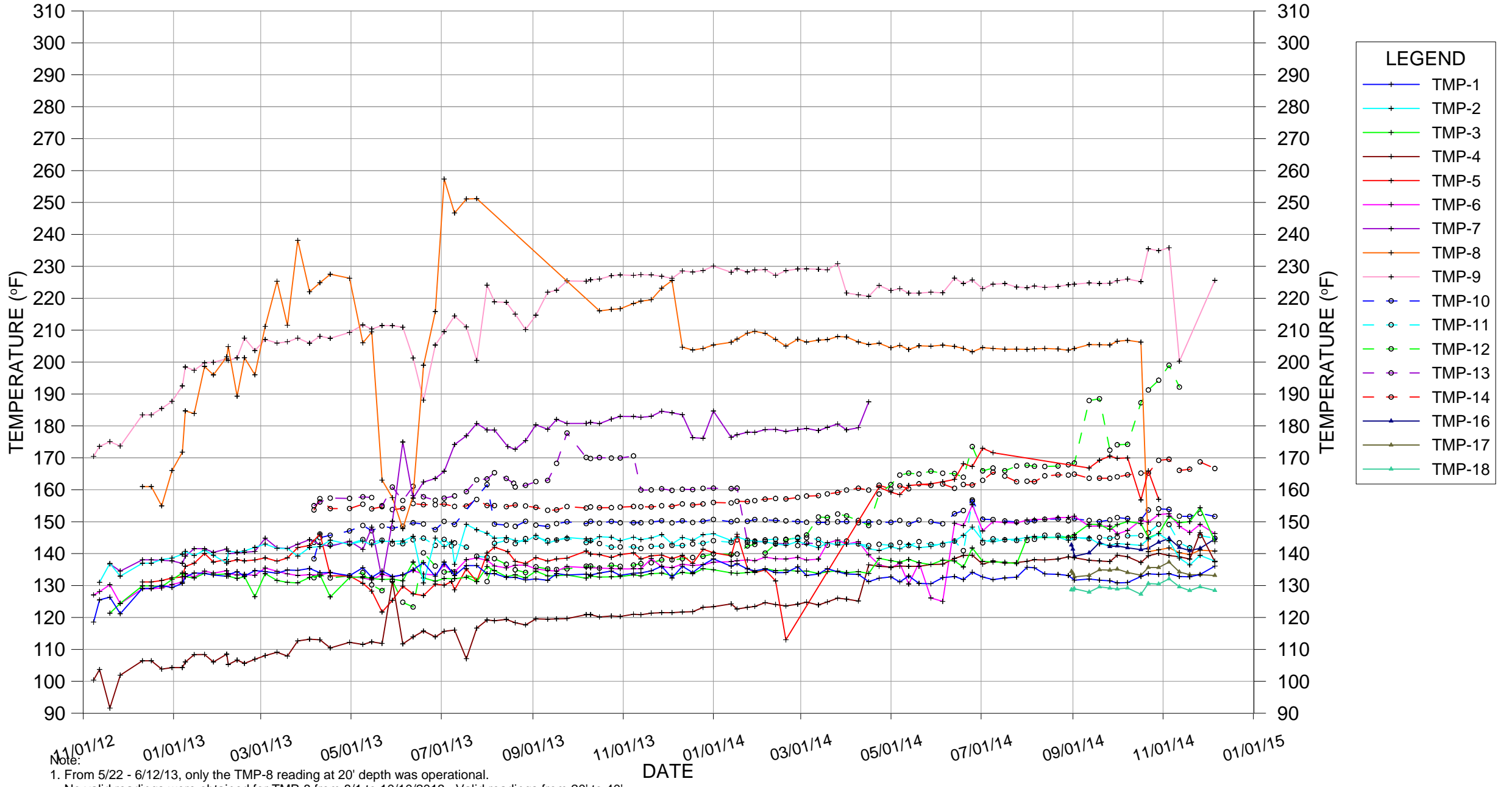


Note: 11/01/12 01/01/13 03/01/13 05/01/13 07/01/13 09/01/13 11/01/13 01/01/14 03/01/14 05/01/14 07/01/14 09/01/14 11/01/14 01/01/15

- 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

# AVERAGE 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

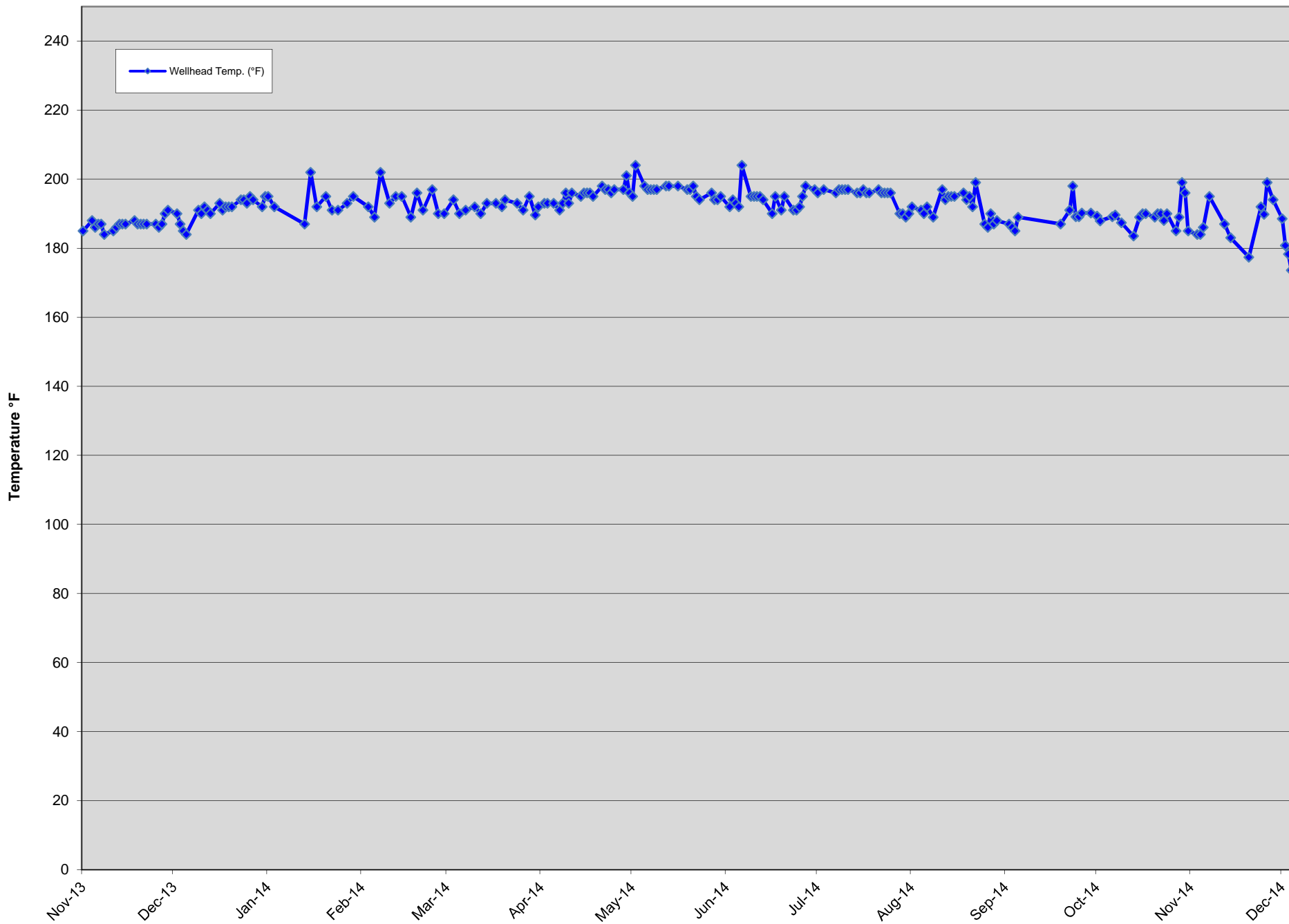
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**ATTACHMENT C**

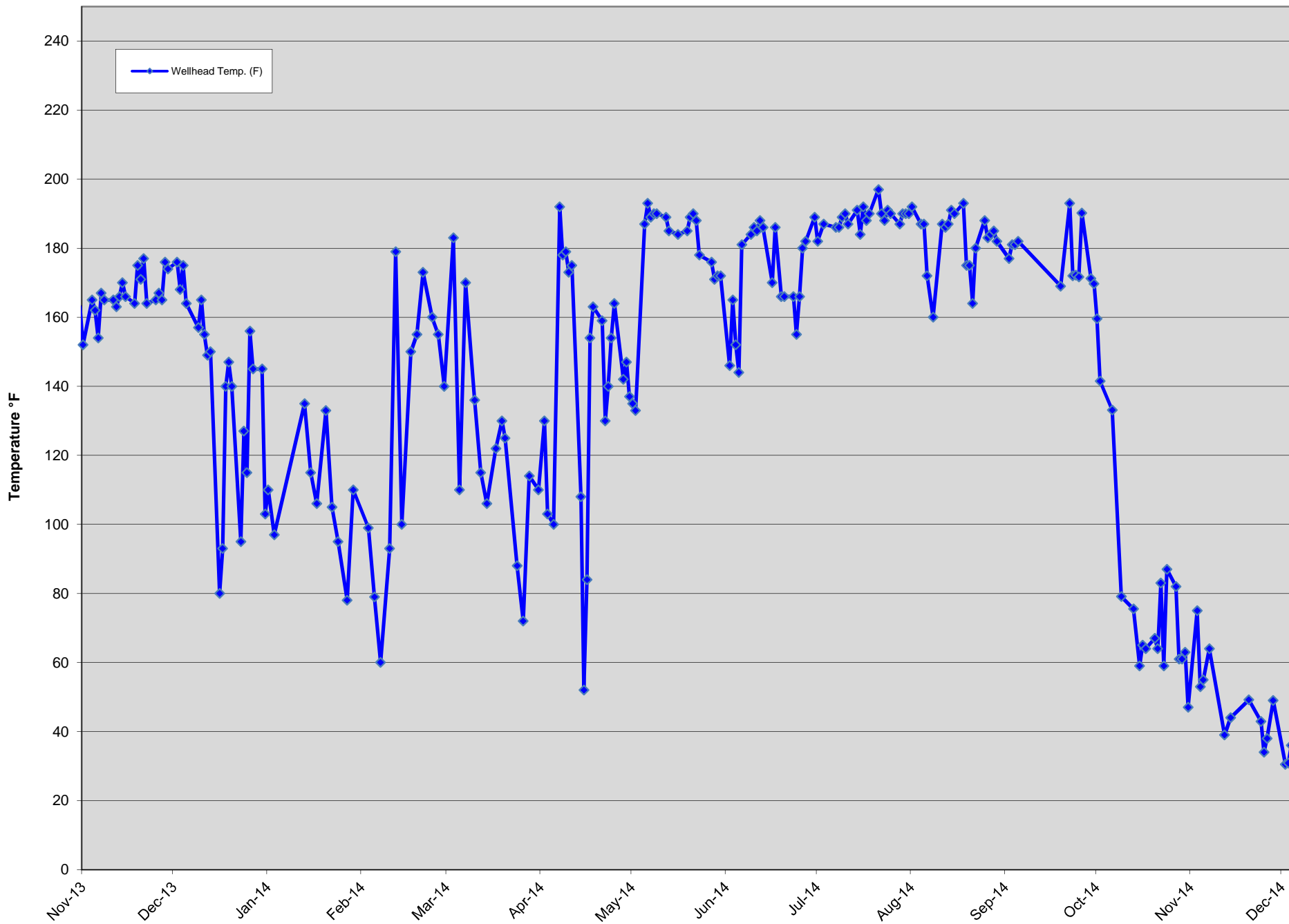
**GAS INTERCEPTOR WELLHEAD TEMPERATURE GRAPHS**

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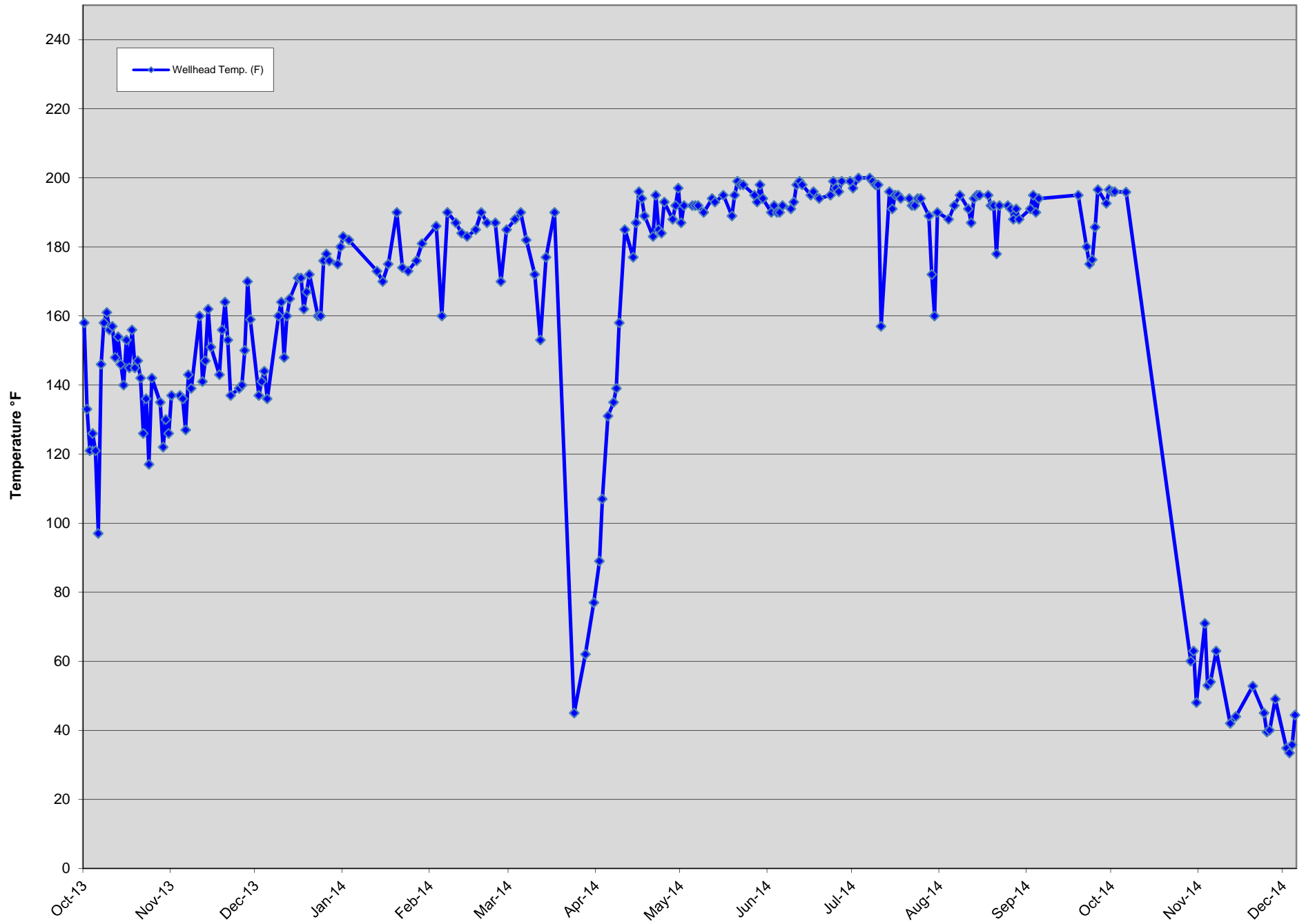
# GIW-1 Wellhead Temperatures



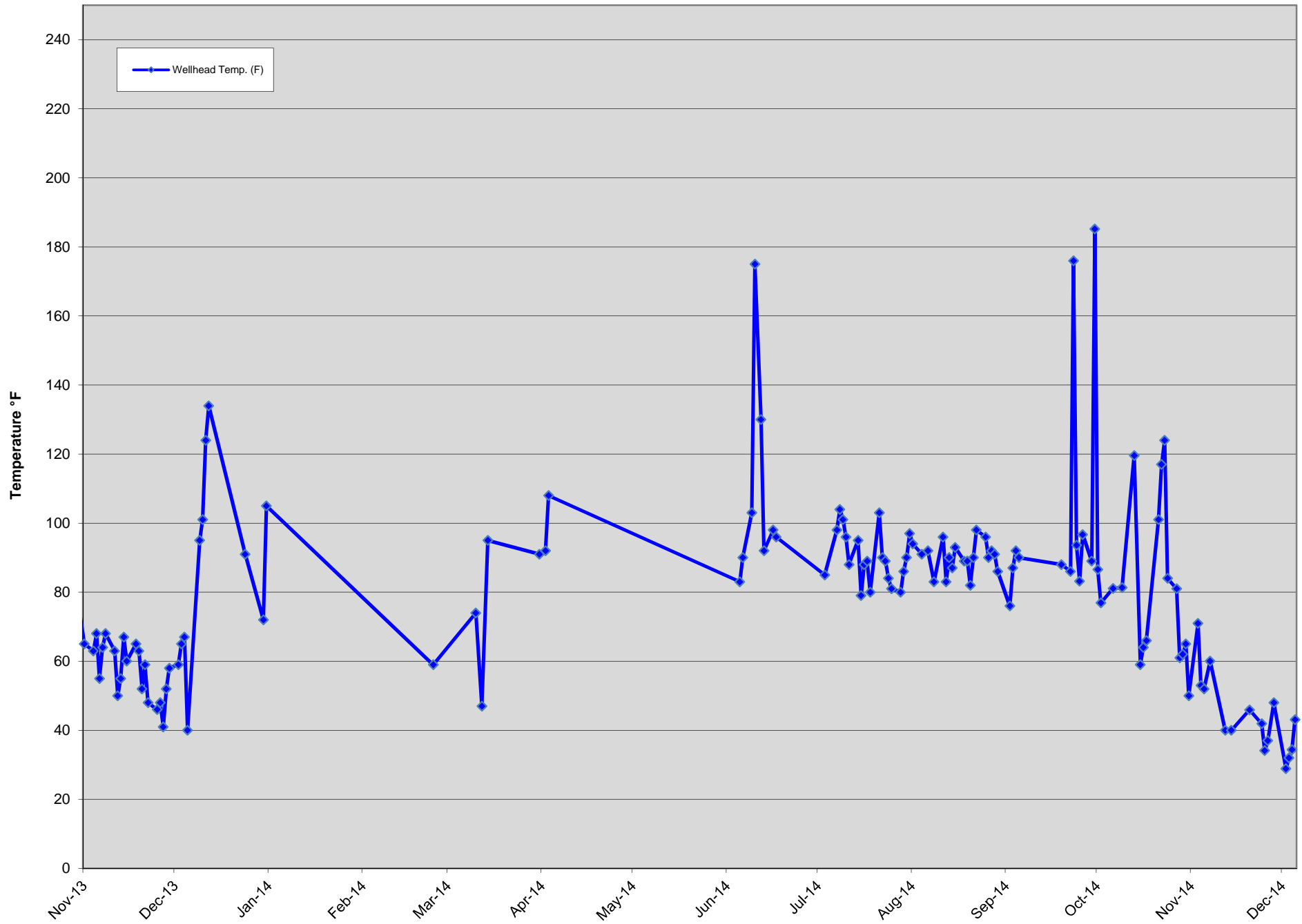
# GIW-2 Wellhead Temperatures



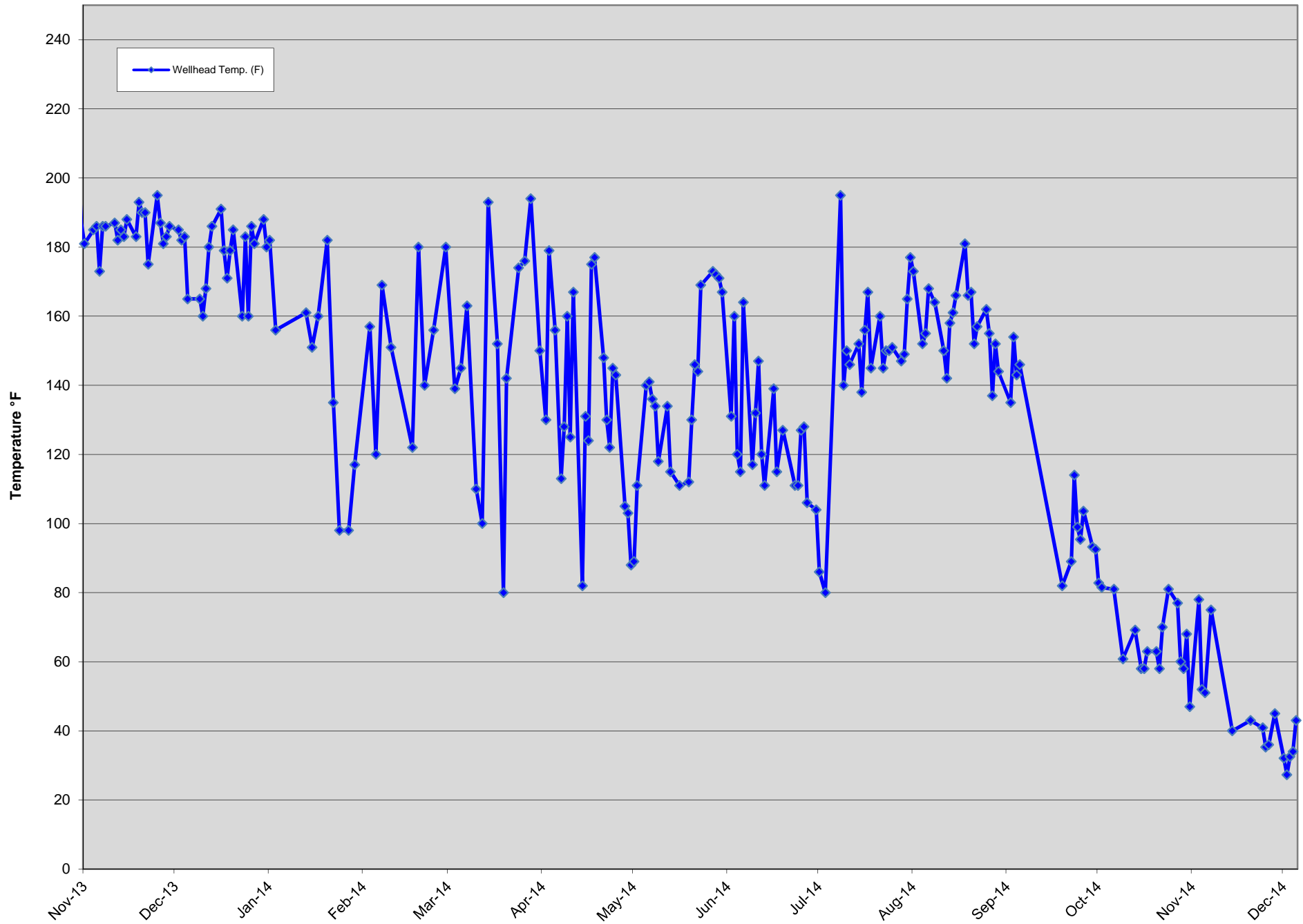
# GIW-3 Wellhead Temperatures



# GIW-4 Wellhead Temperatures

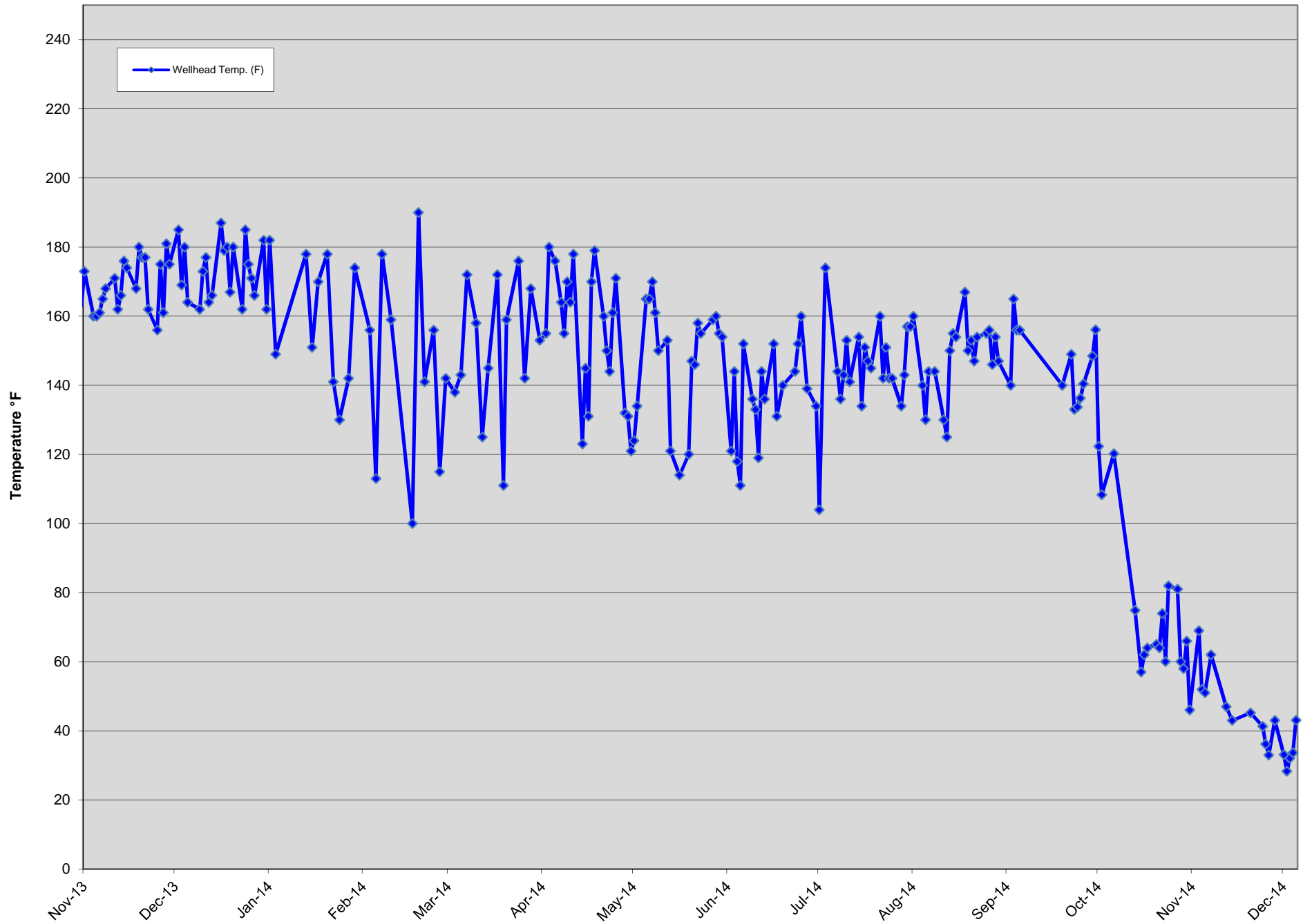


# GIW-5 Wellhead Temperatures

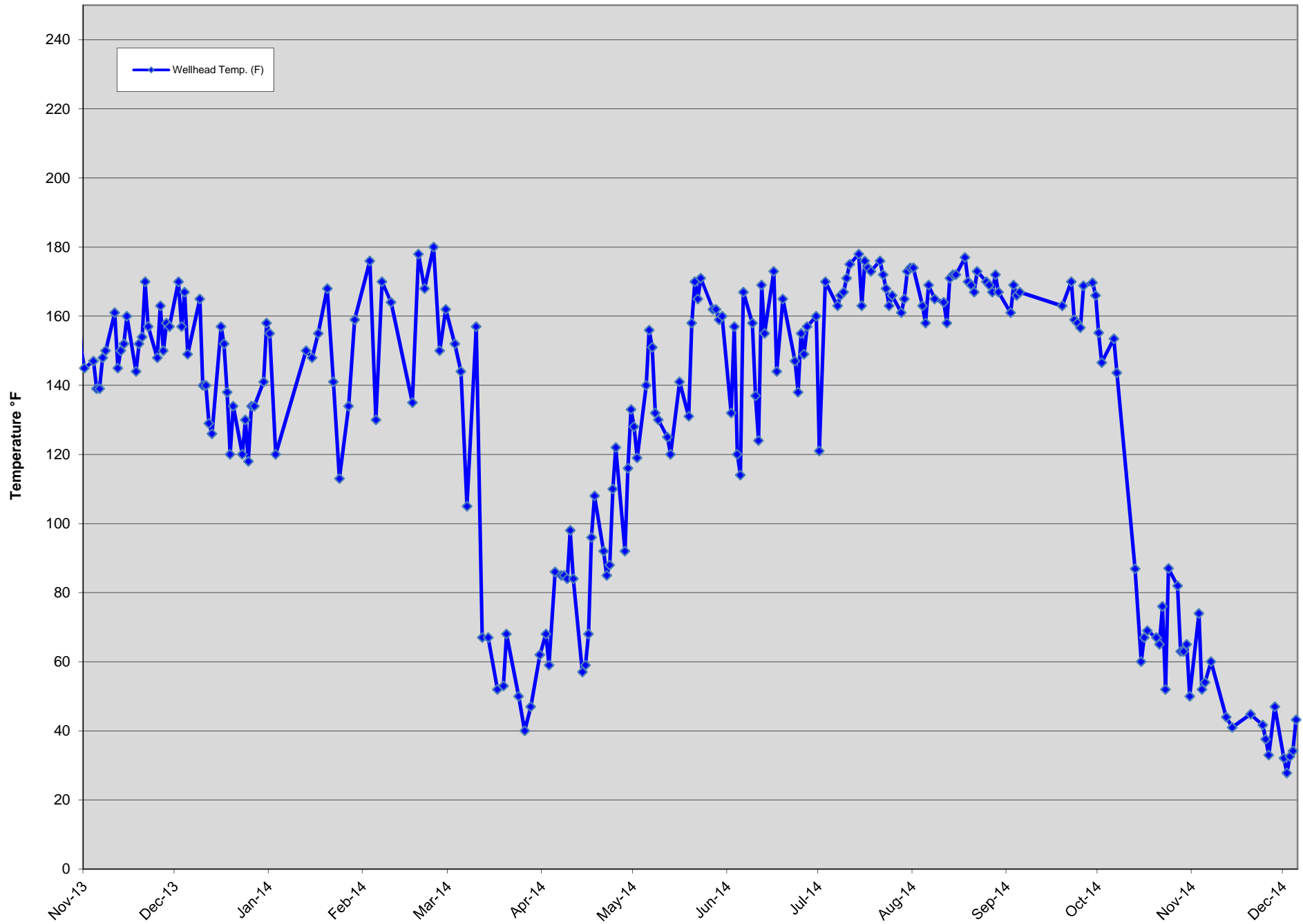




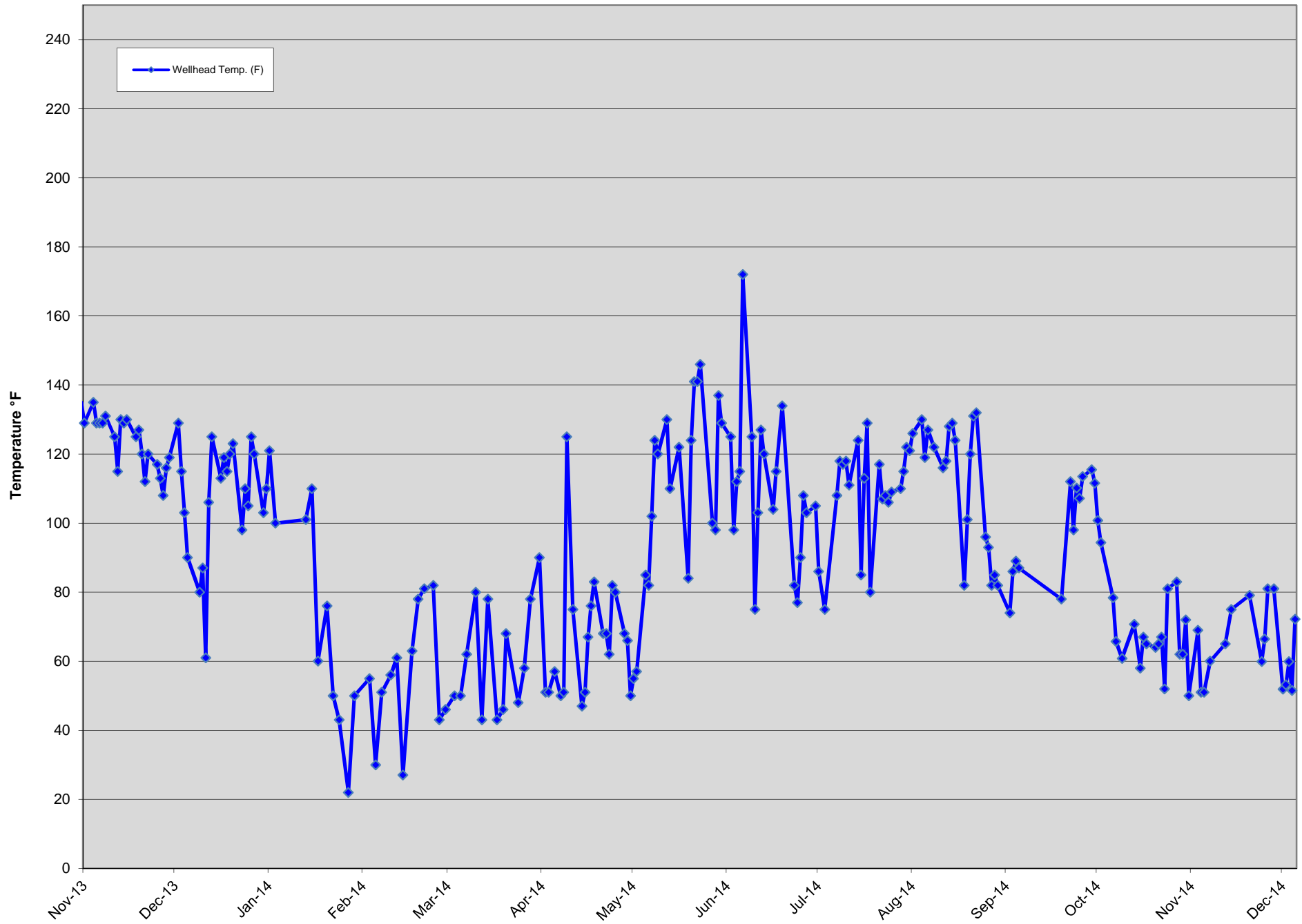
# GIW-6 Wellhead Temperatures



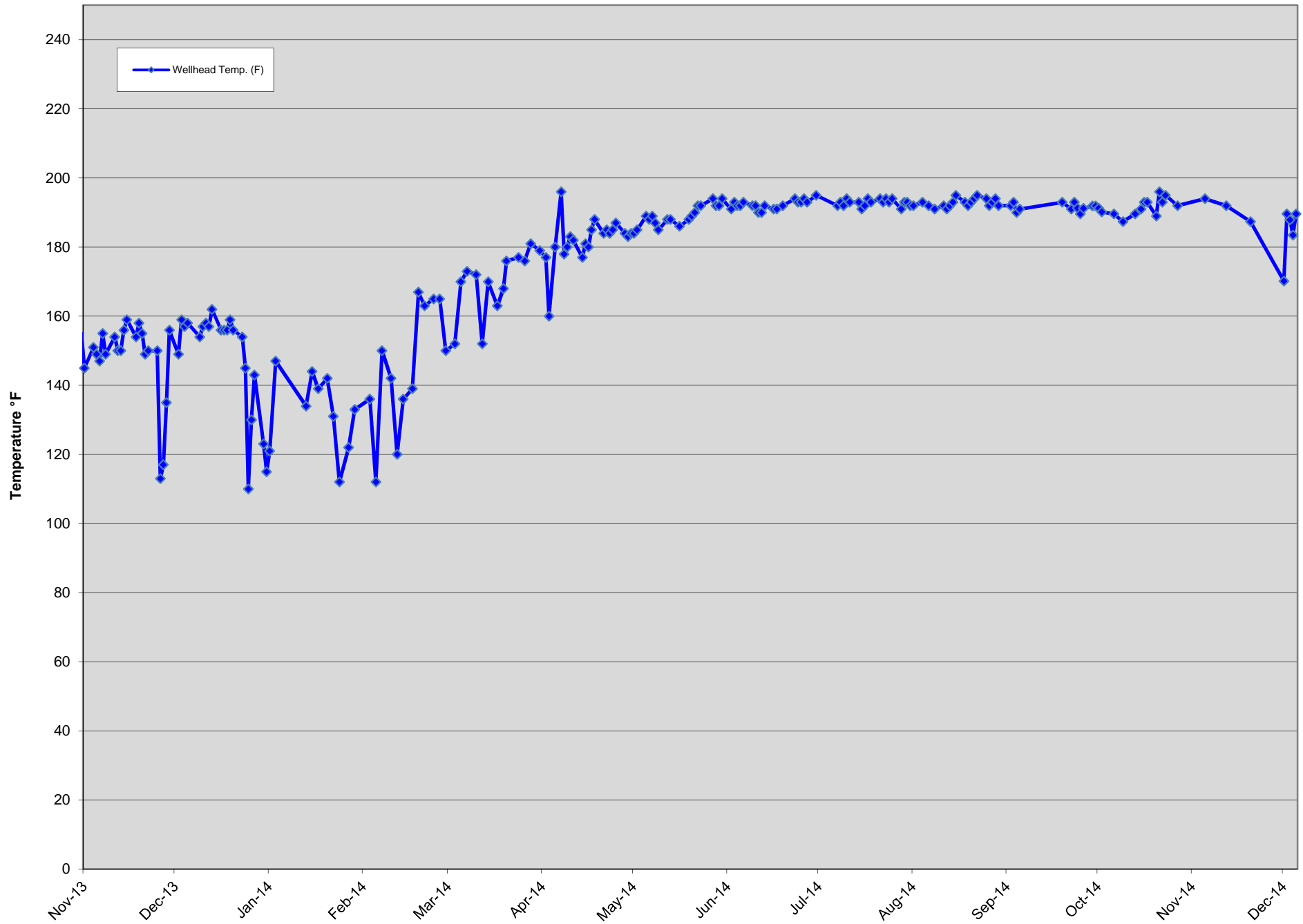
# GIW-7 Wellhead Temperatures



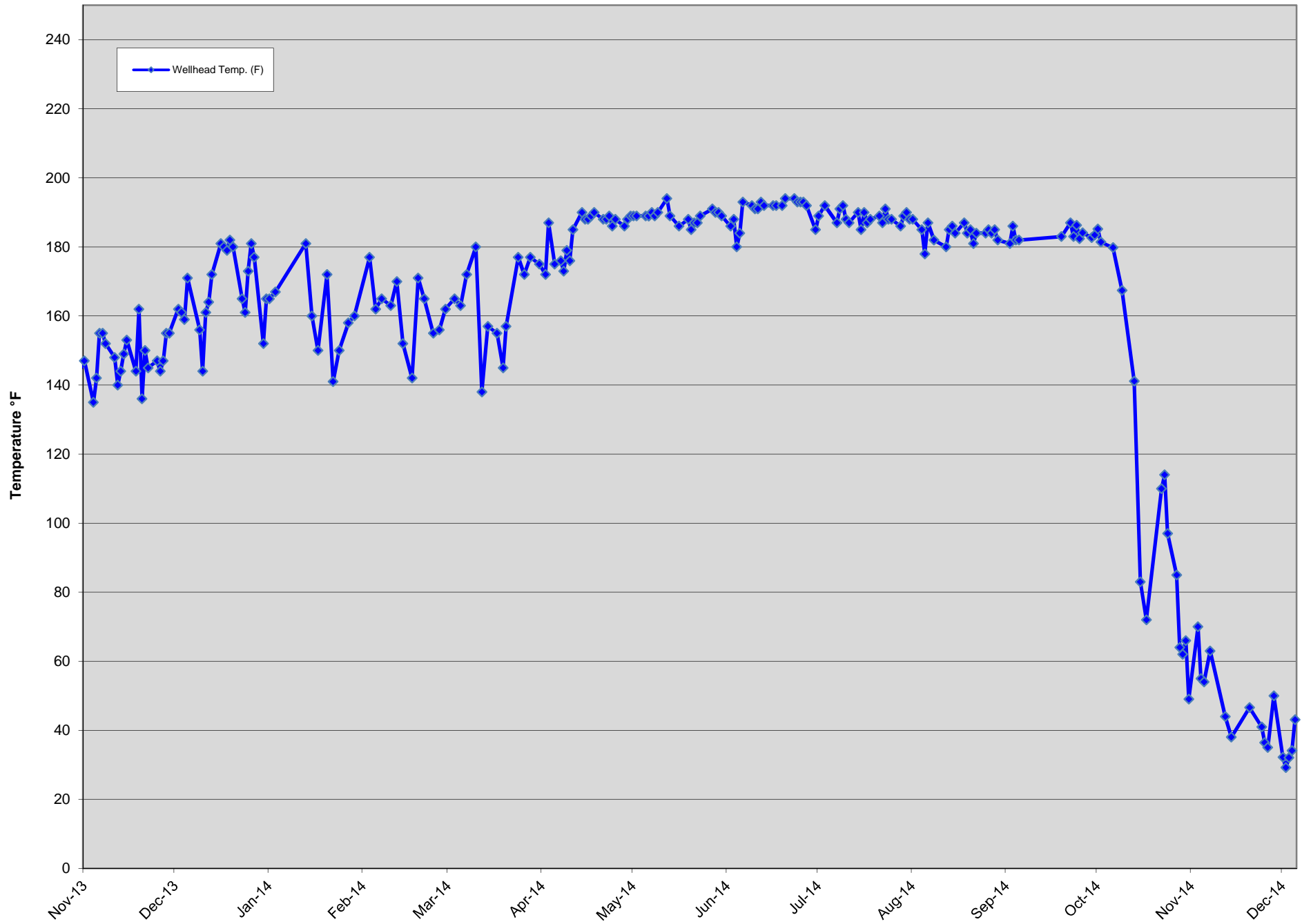
# GIW-8 Wellhead Temperatures



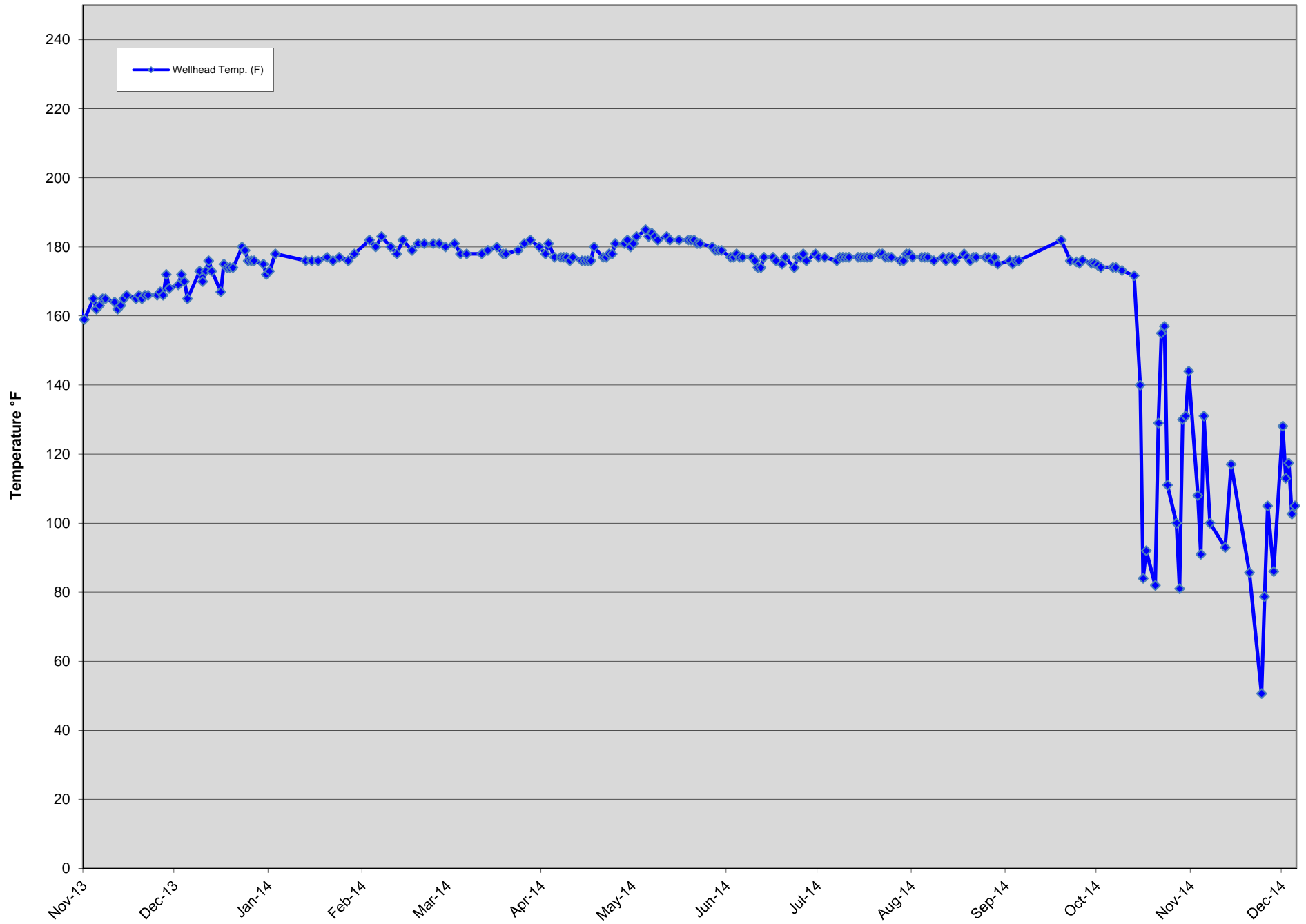
# GIW-9 Wellhead Temperatures



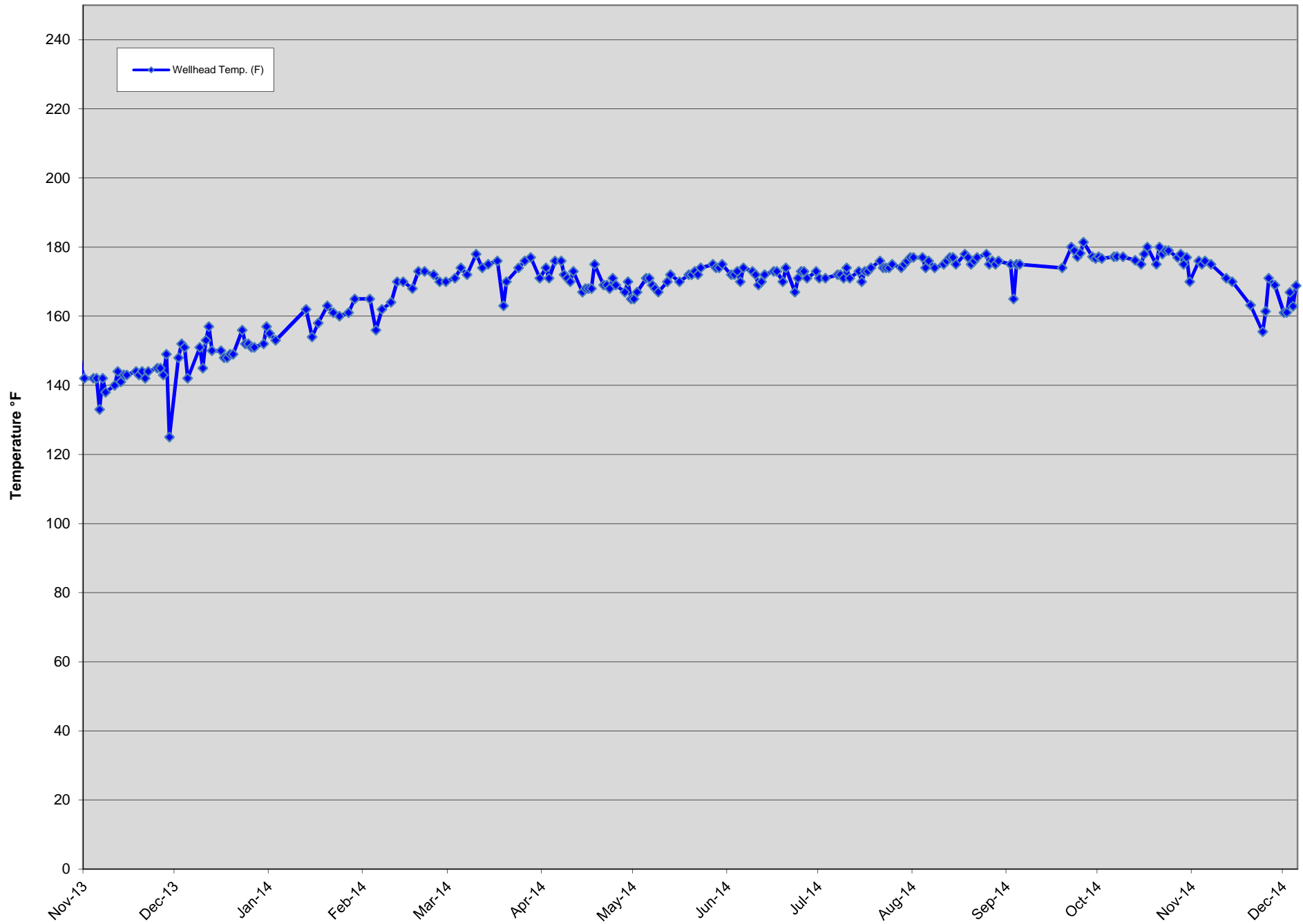
# GIW-10 Wellhead Temperatures



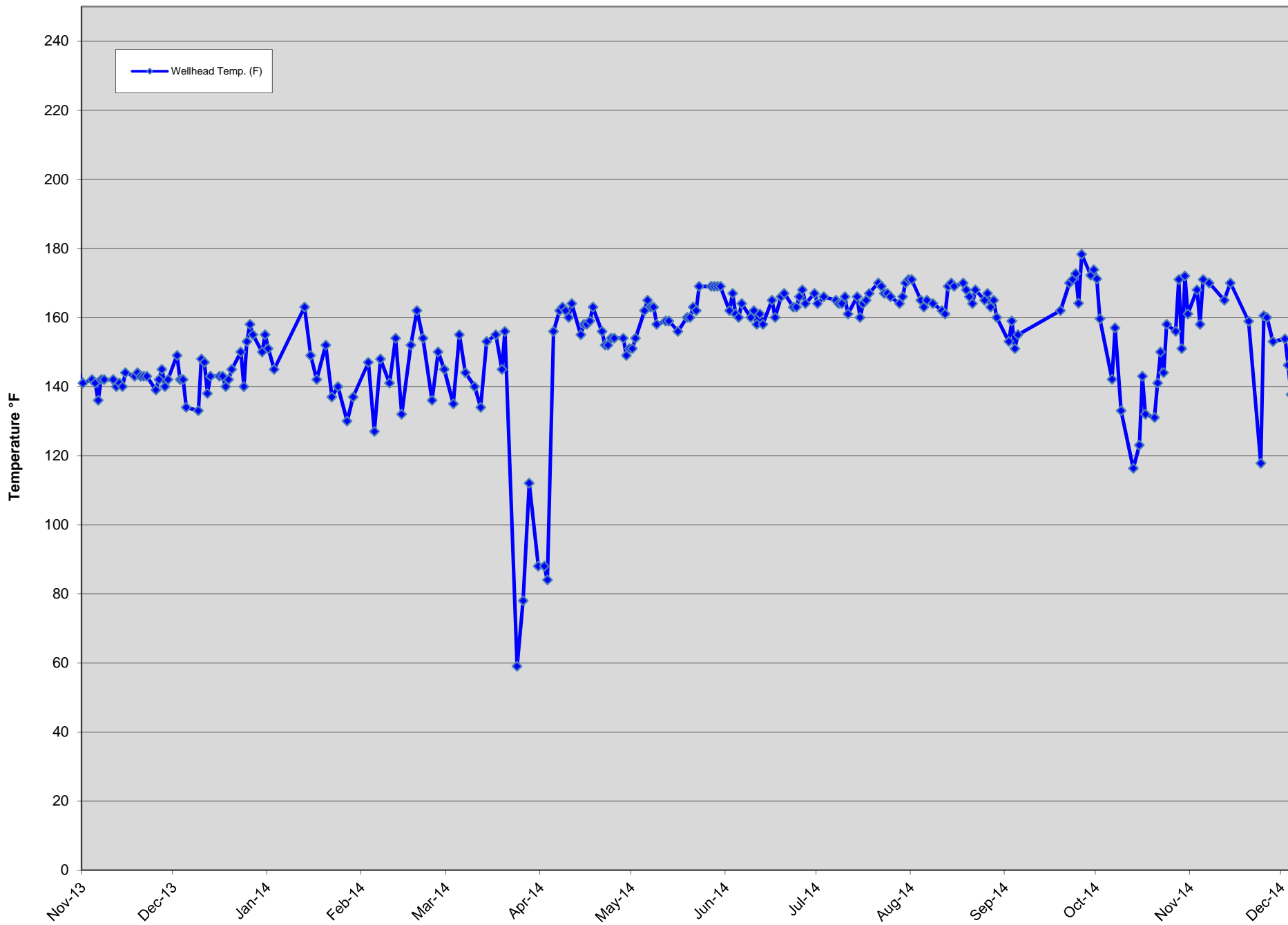
# GIW-11 Wellhead Temperatures



# GIW-12 Wellhead Temperatures



# GIW-13 Wellhead Temperatures





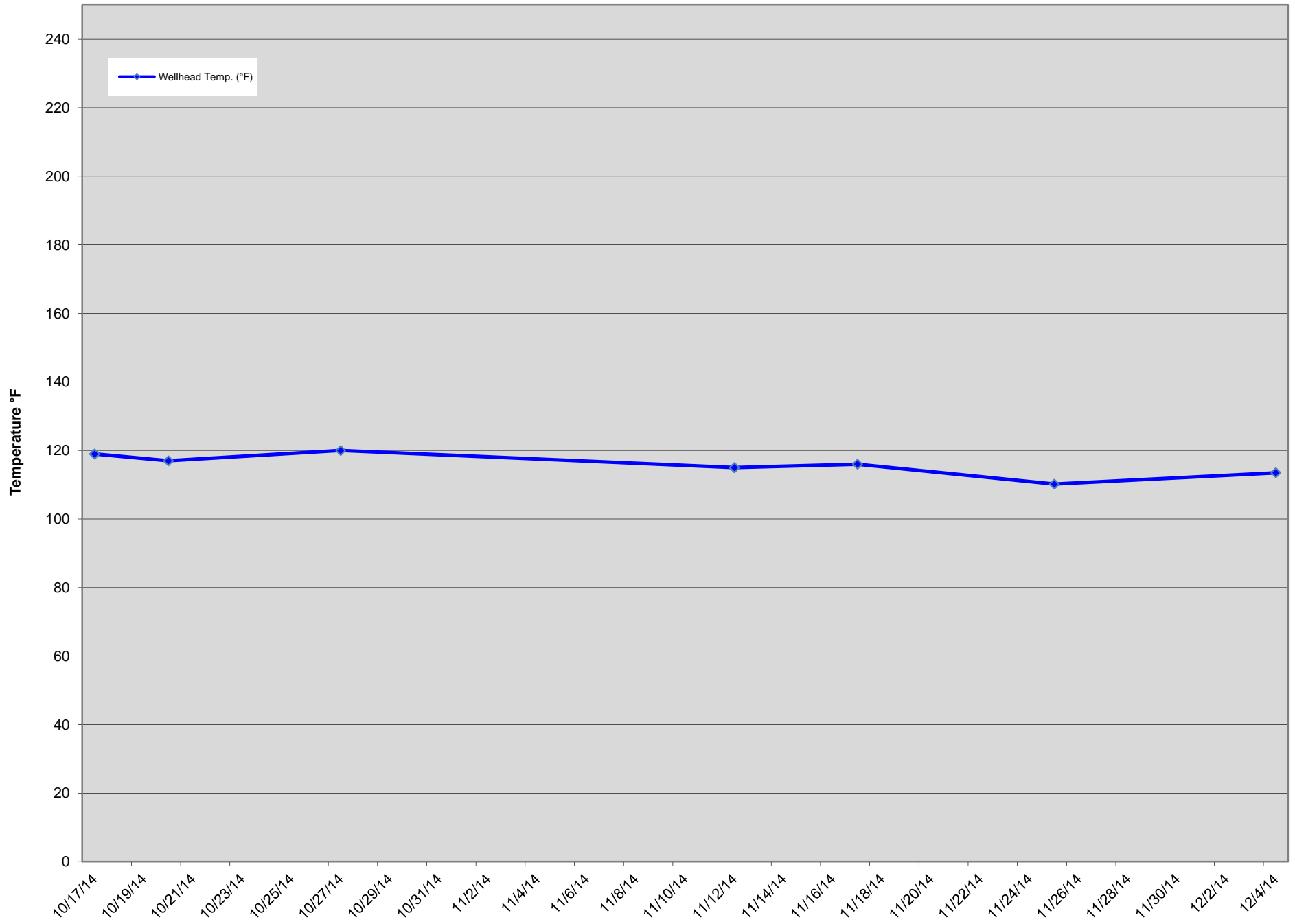
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**ATTACHMENT D**

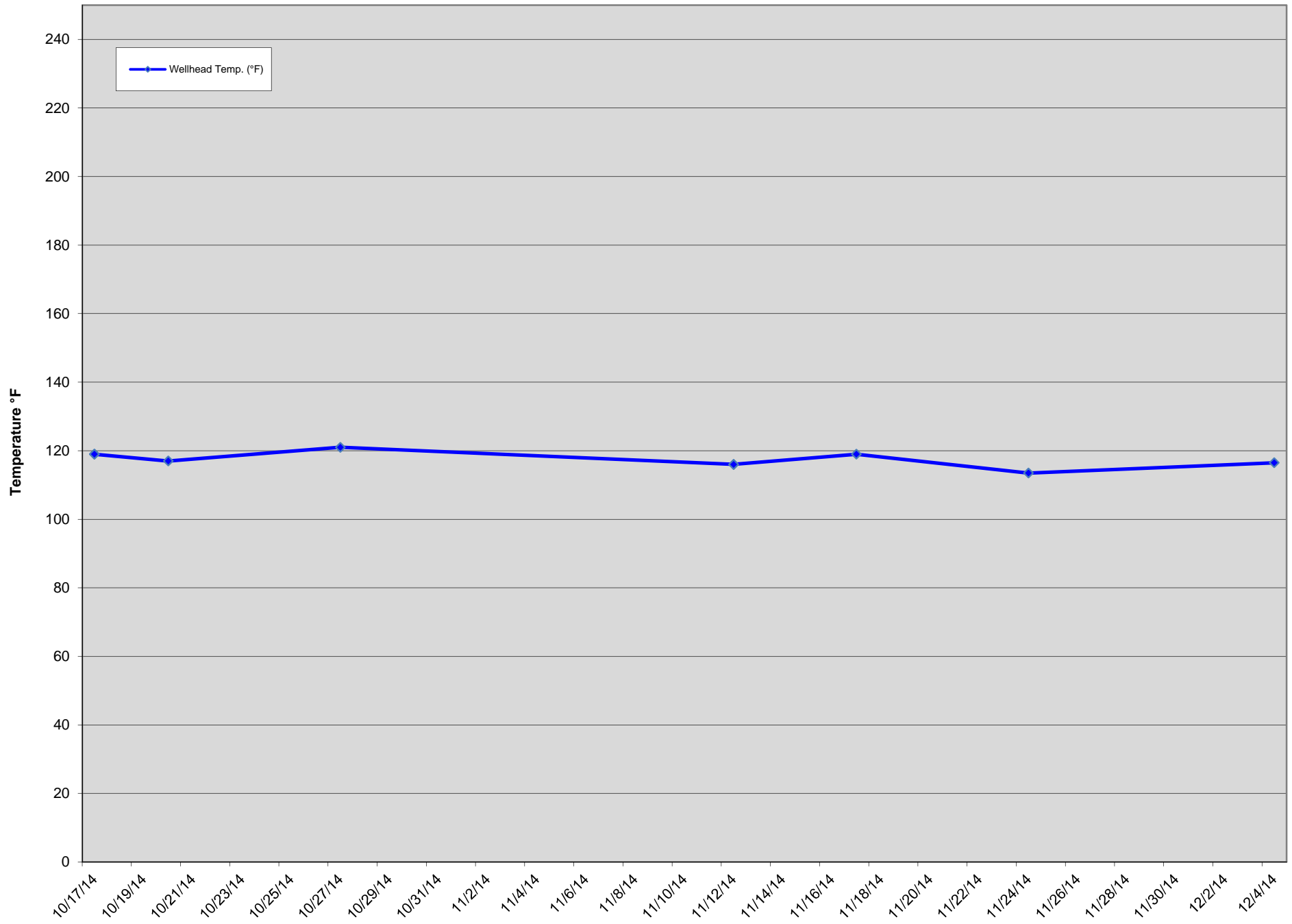
**NECK-AREA GAS EXTRACTION WELL DATA**

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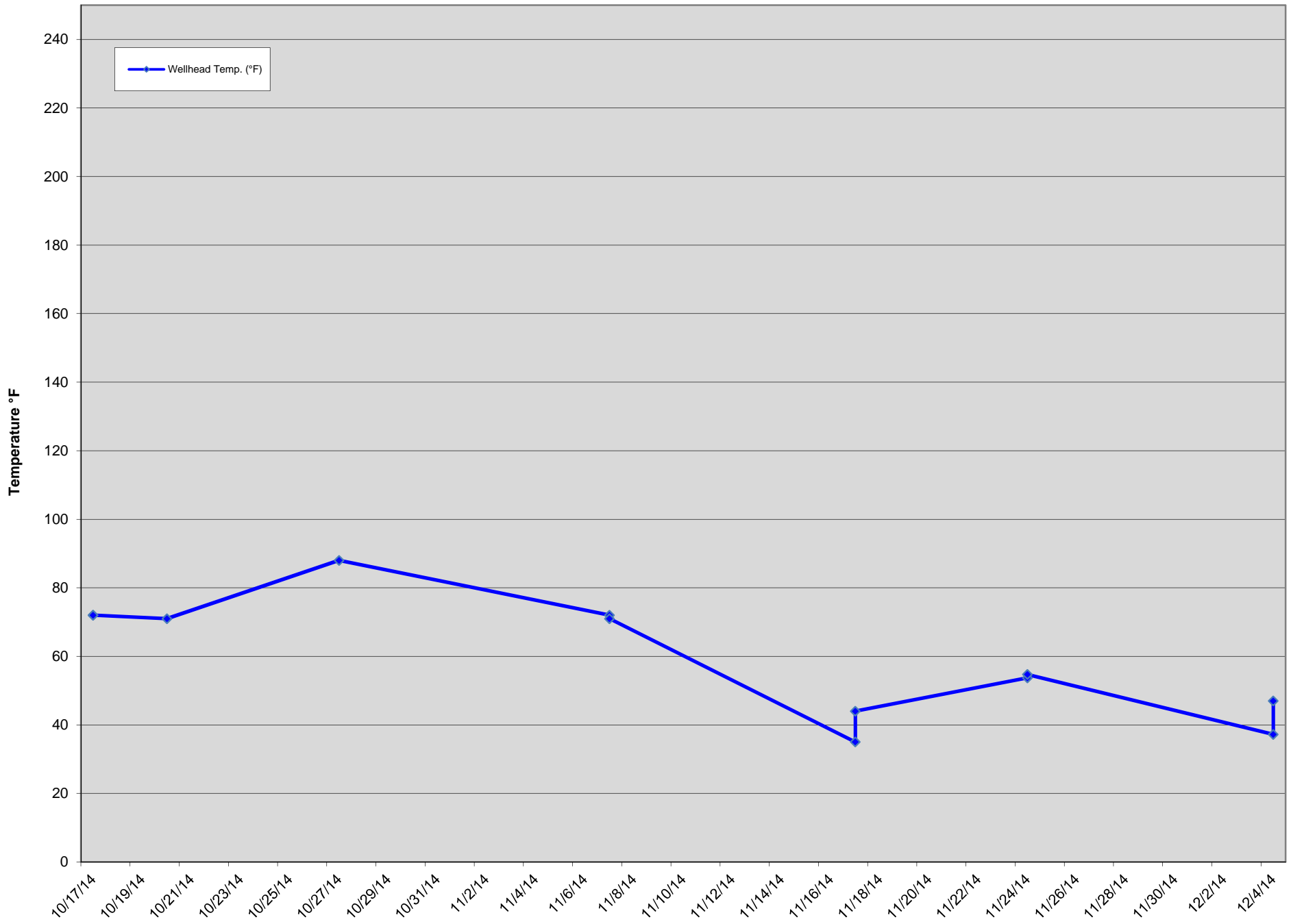
# GEW-08 Wellhead Temperatures



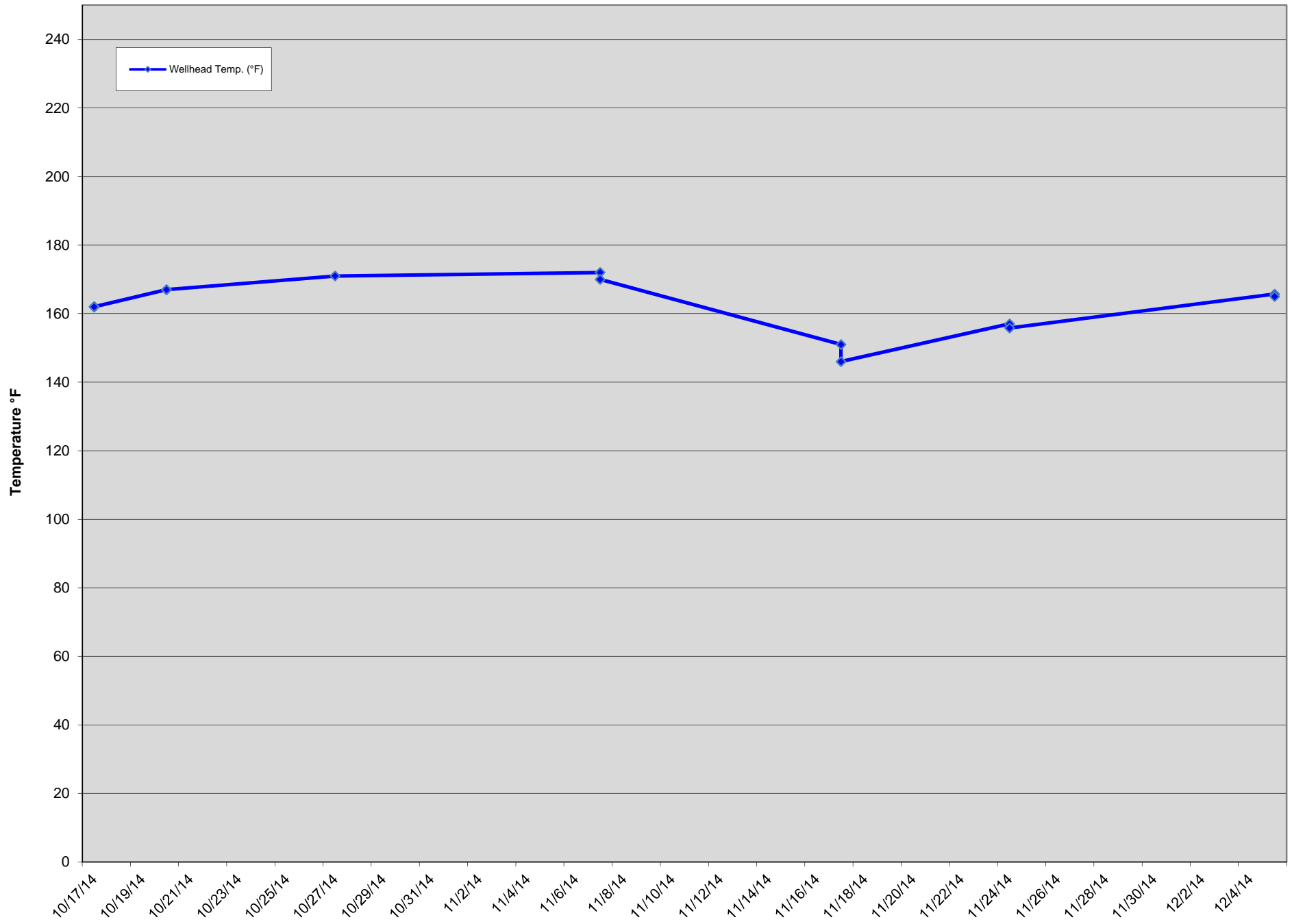
# GEW-09 Wellhead Temperatures



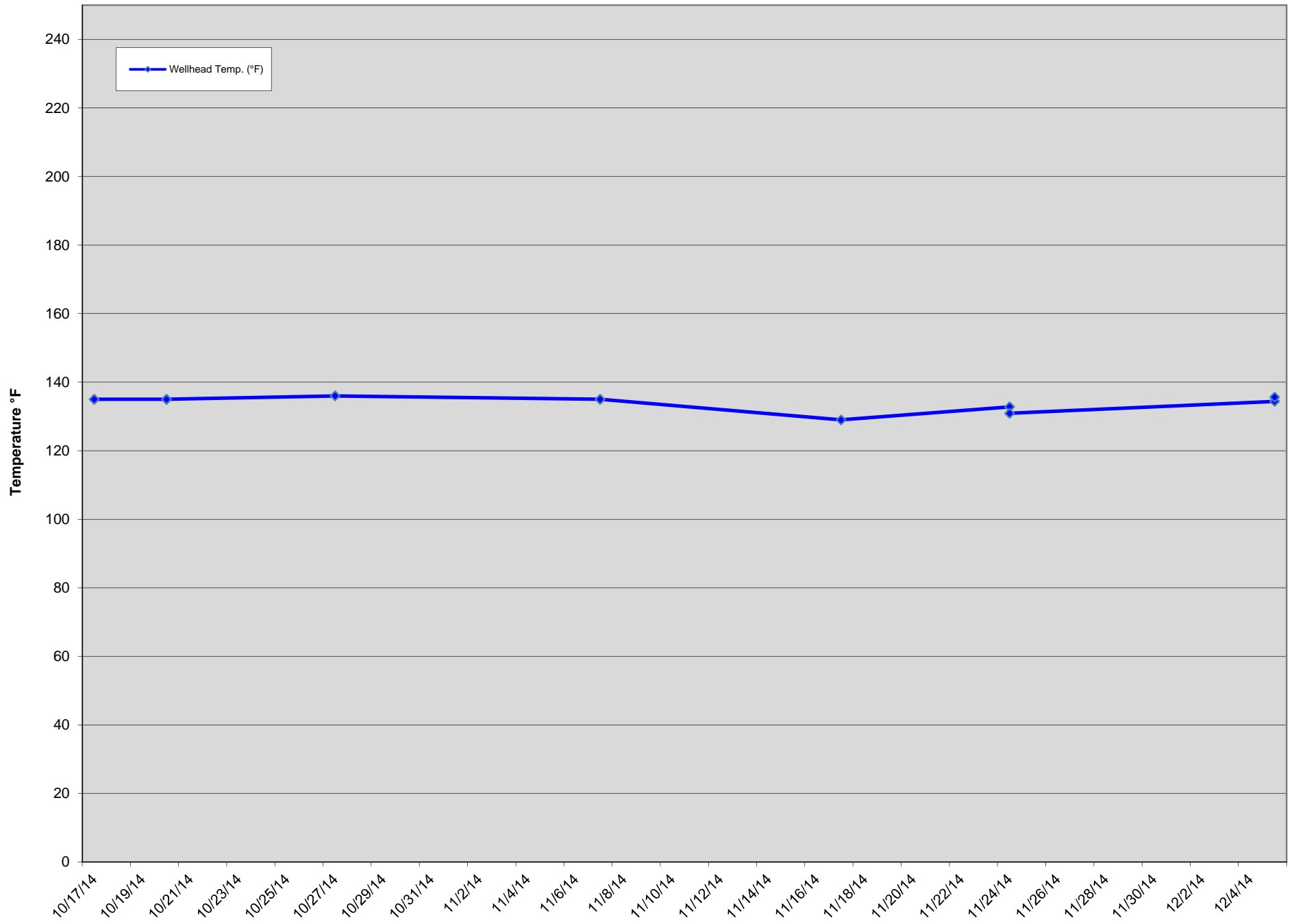
# GEW-10 Wellhead Temperatures



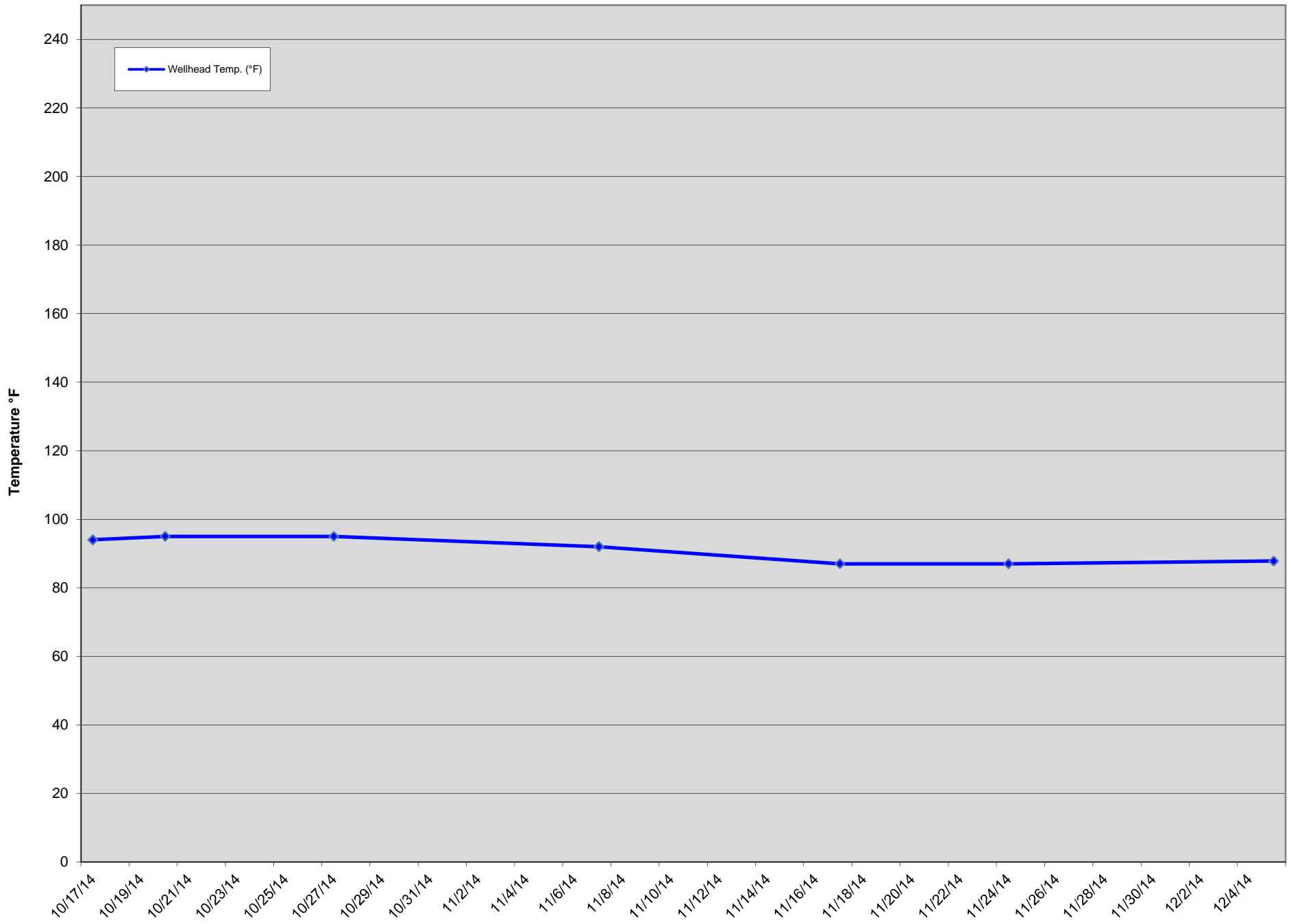
# GEW-38 Wellhead Temperatures



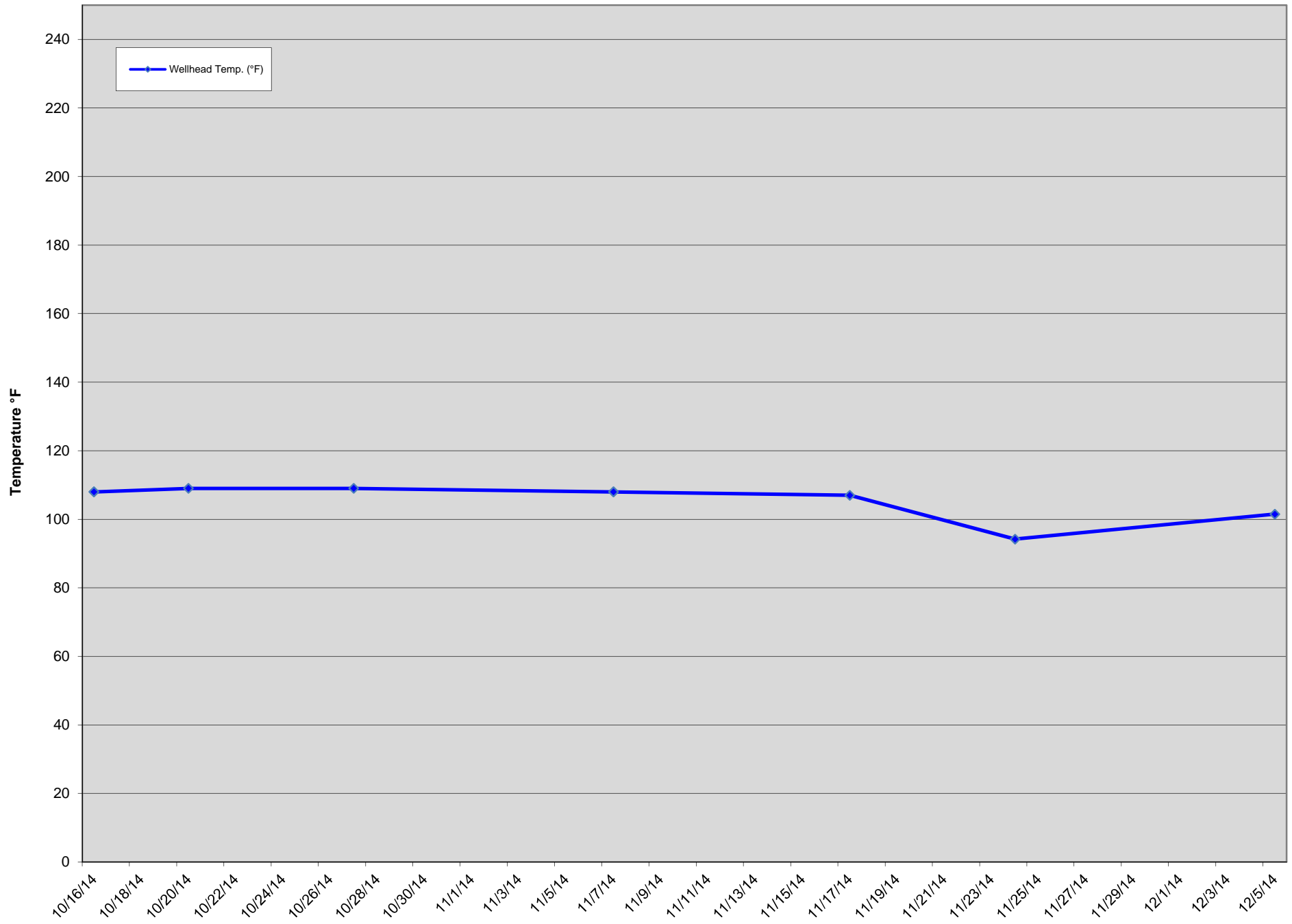
# GEW-39 Wellhead Temperatures



# GEW-40 Wellhead Temperatures

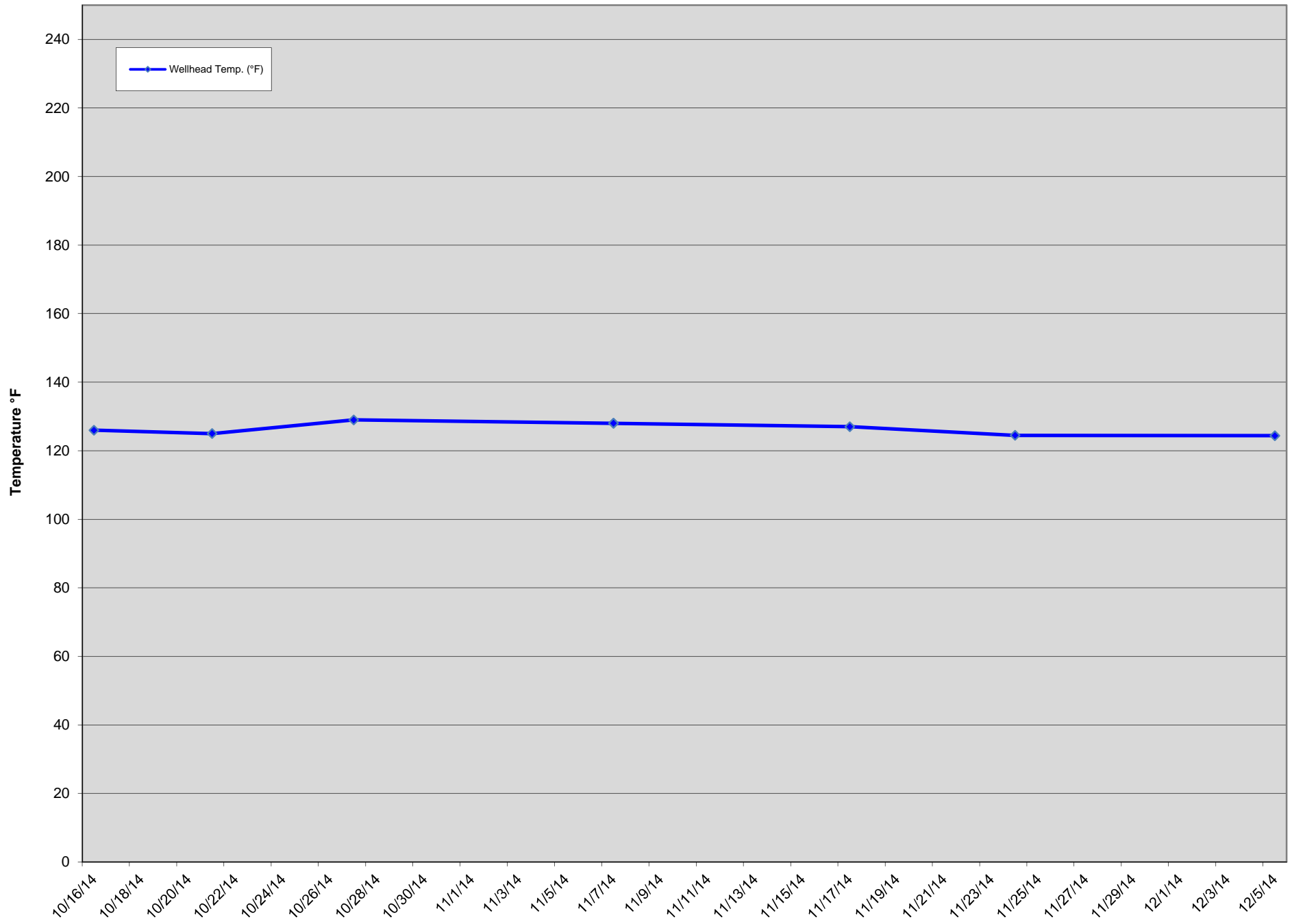


# GEW-41R Wellhead Temperatures

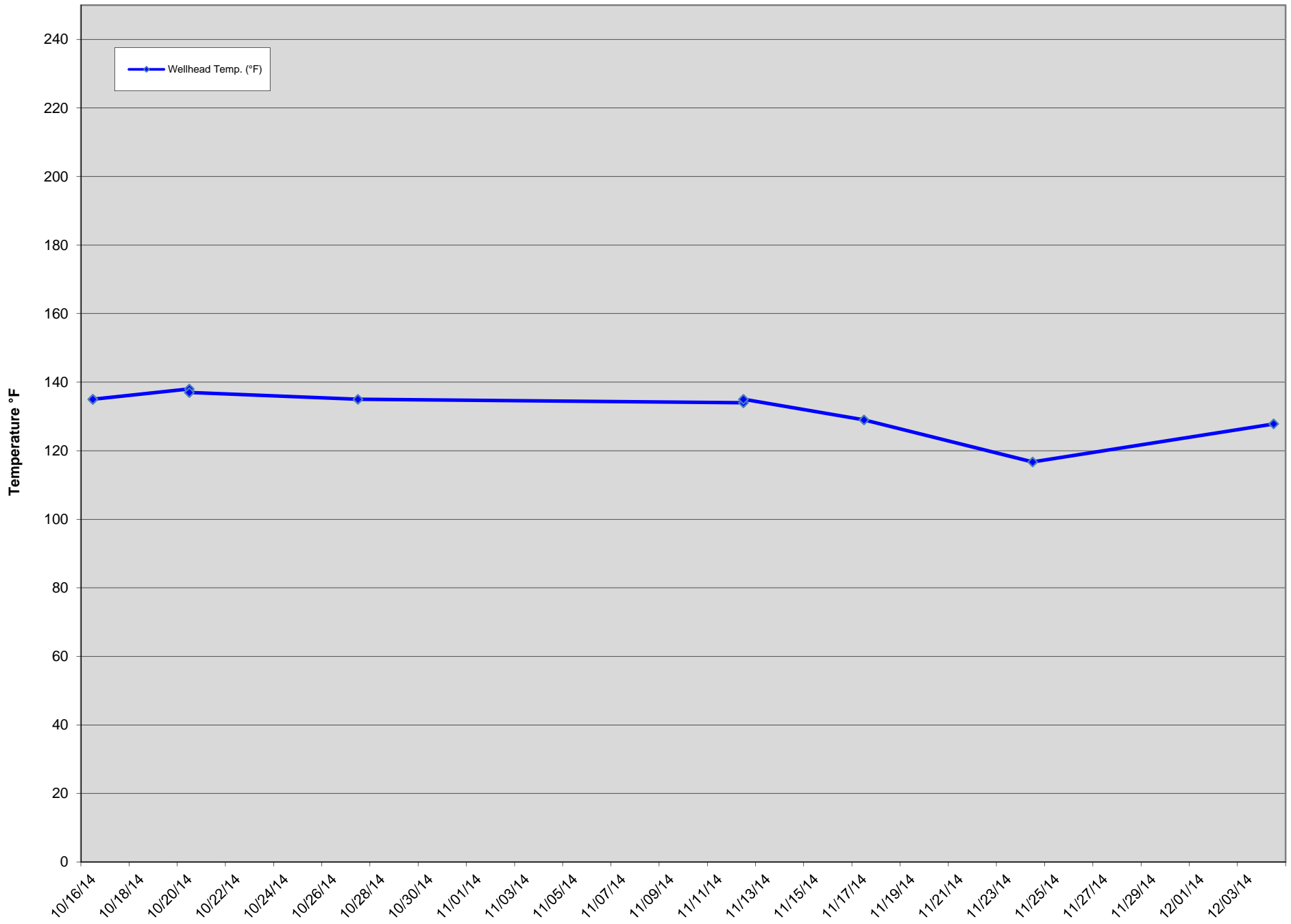




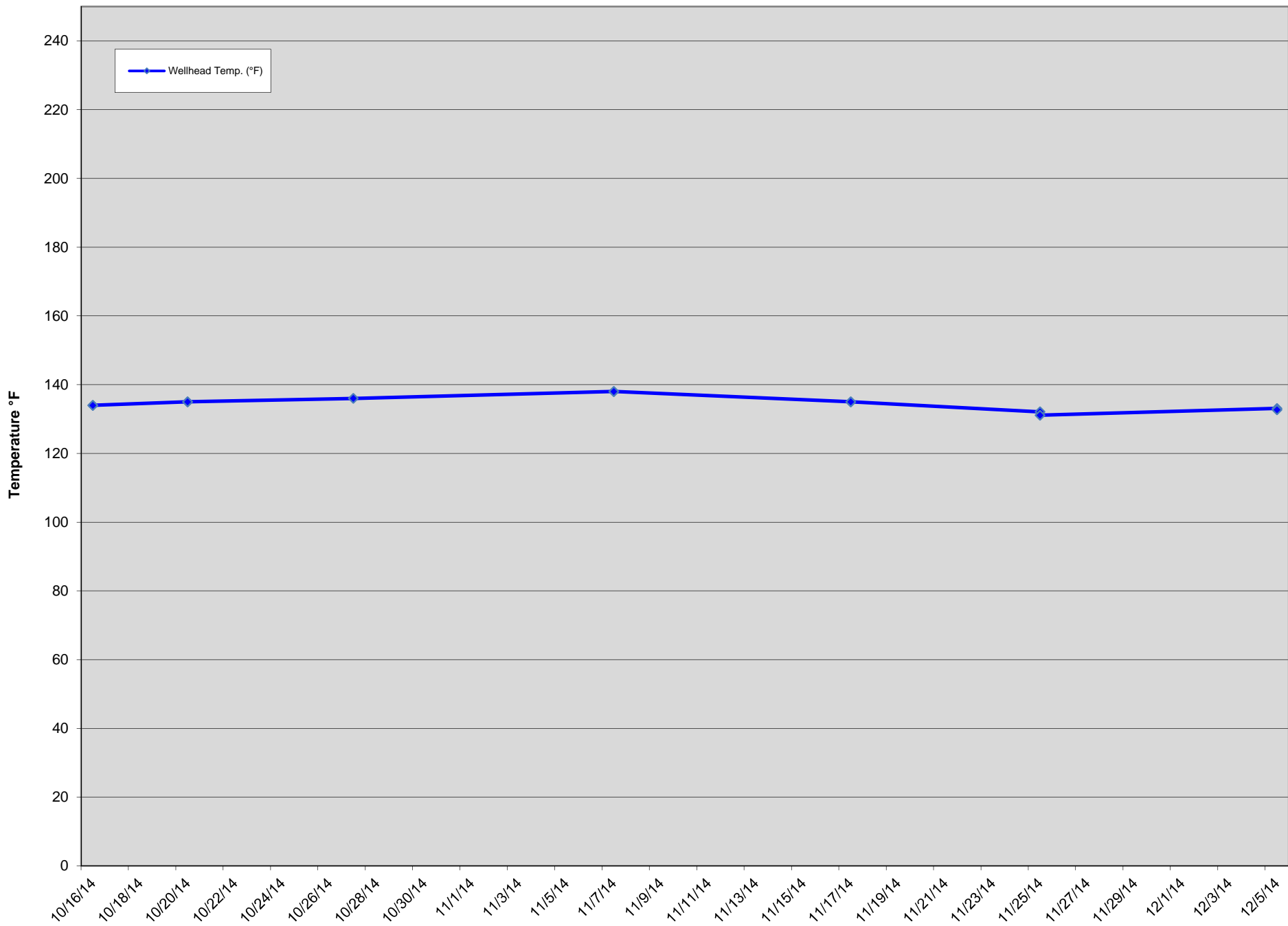
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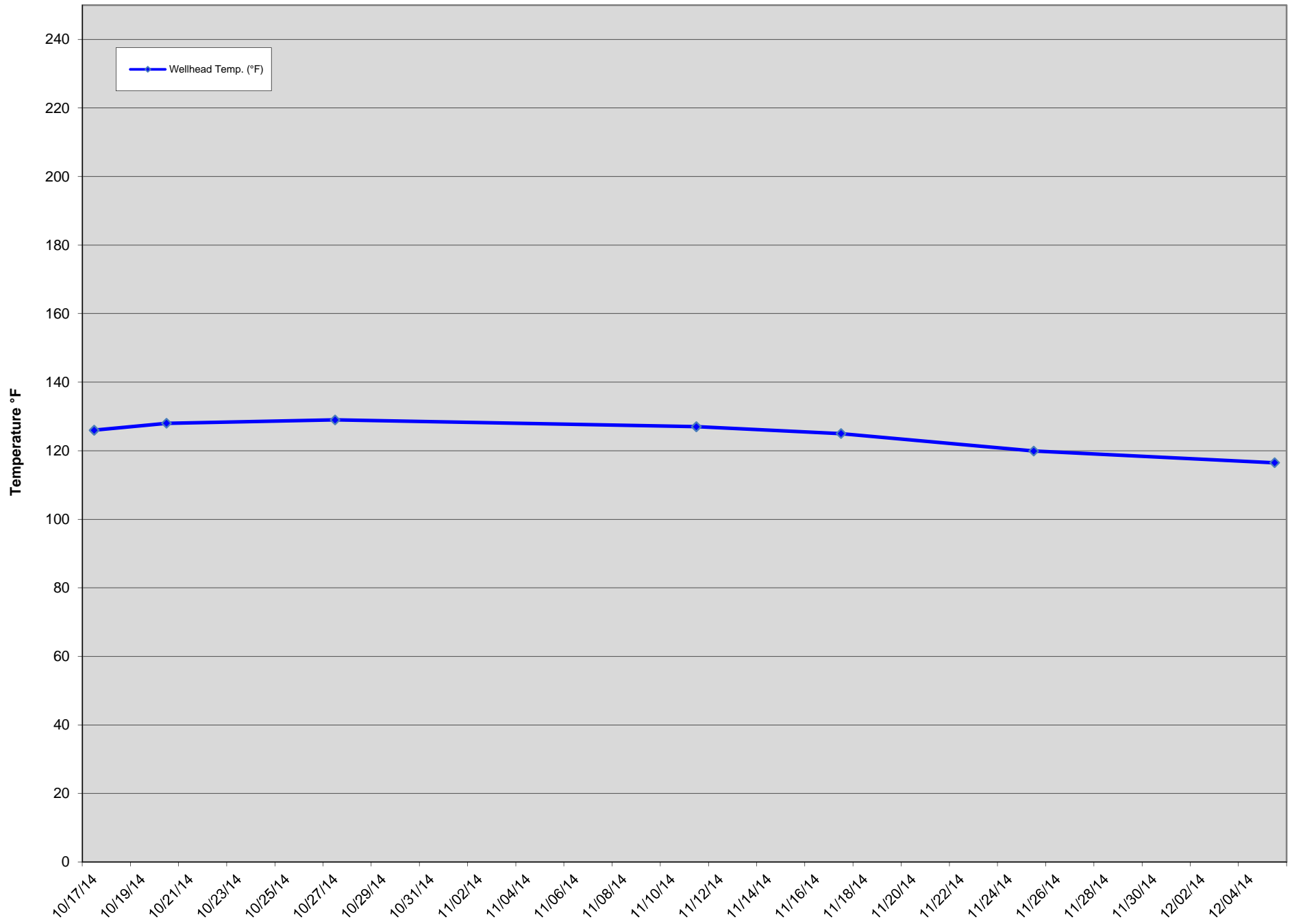
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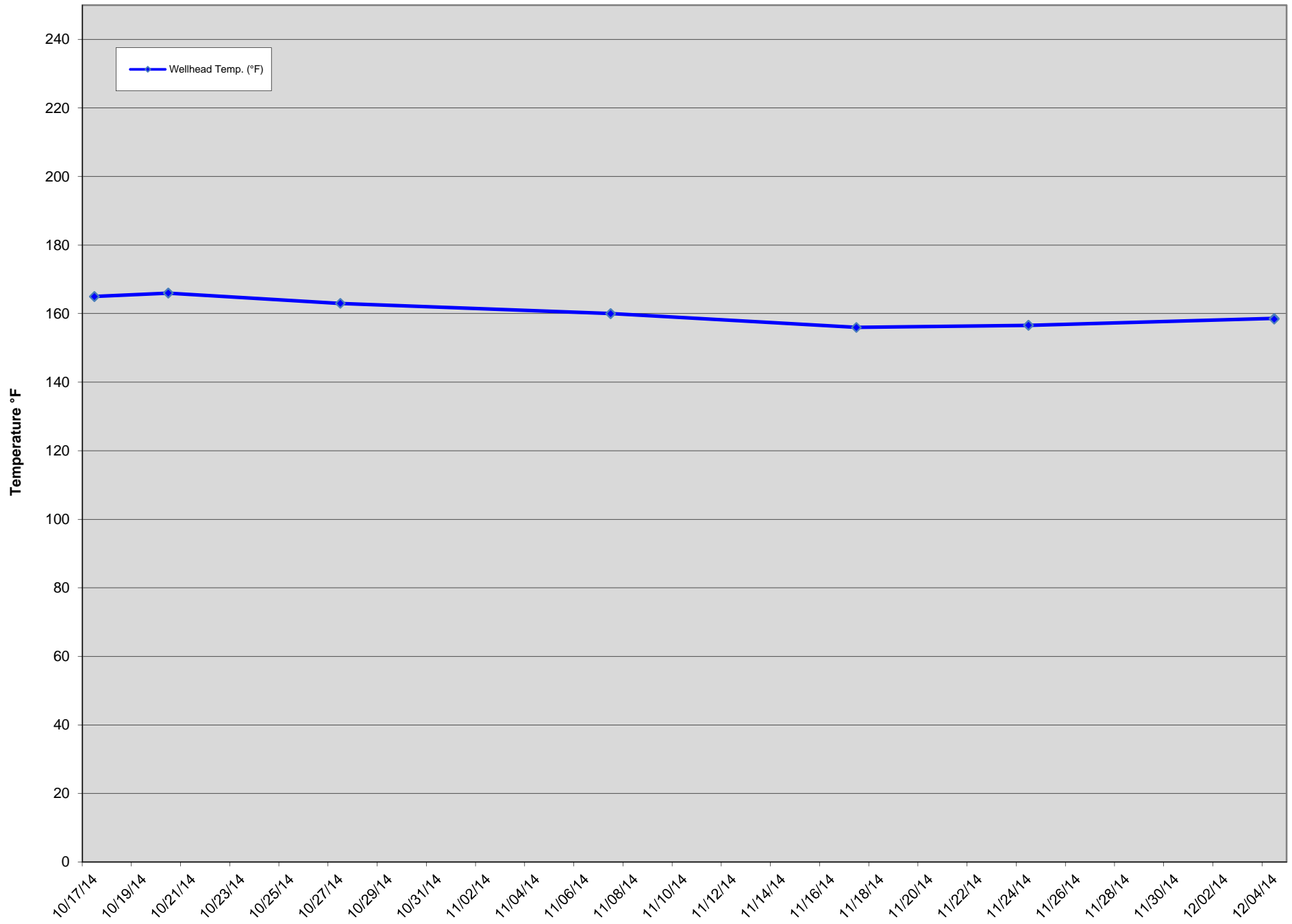
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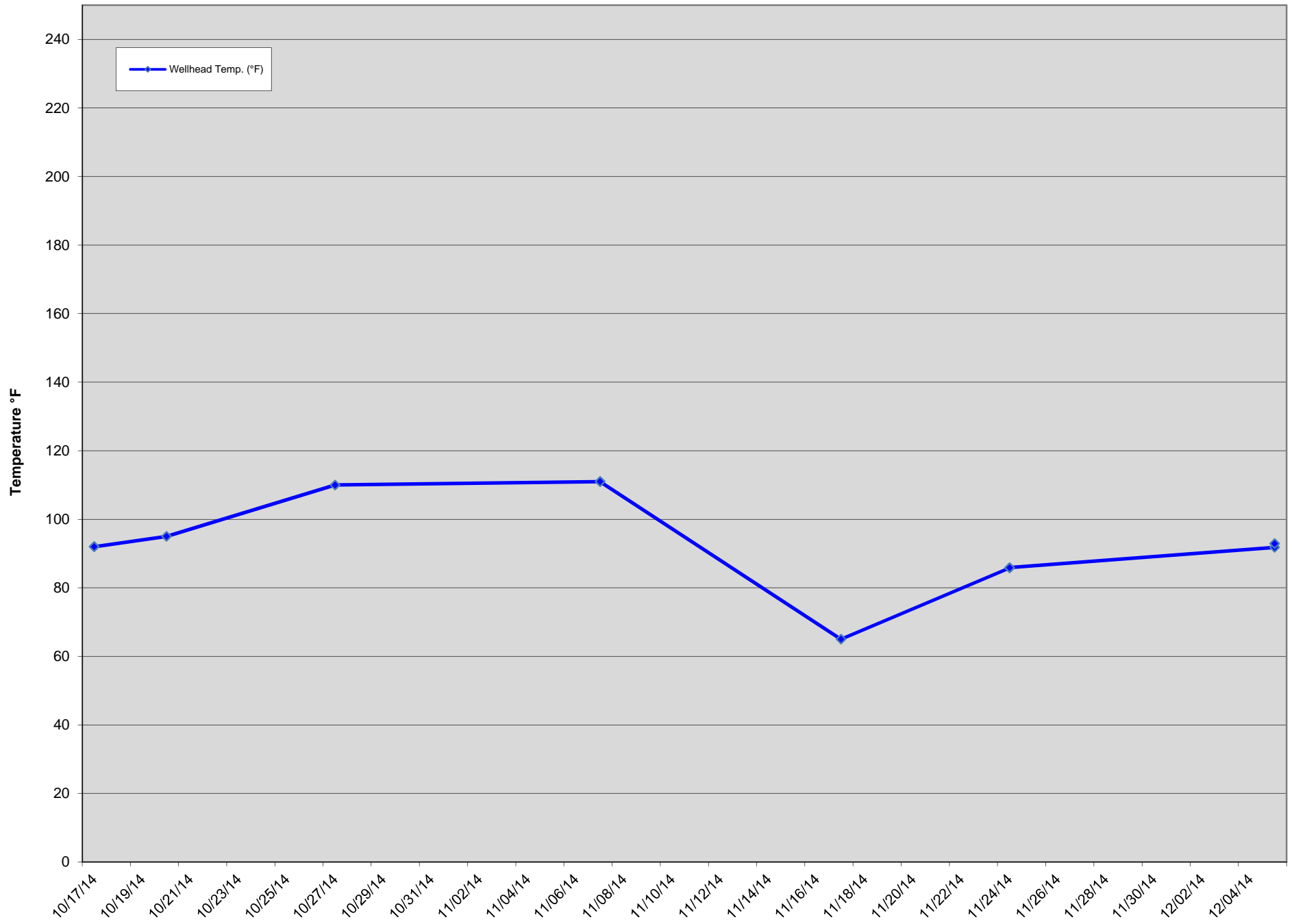
# GEW-55 Wellhead Temperatures



# GEW-56R Wellhead Temperatures



# GEW-109 Wellhead Temperatures



# GEW-110 Wellhead Temperatures

