Air Force Civil Engineer Center

FORMER
WILLIAMS AIR FORCE BASE

Site ST012
Former Liquid Fuel Storage Area

BCT Update

26 September 2017

ED_005025_00012563-00001

Site ST012 Outline

- Summary of Activities Since August BCT call
- Update on JP-4 degradation based on methane at SVE system
- LNAPL Monitoring/Removal Update
- Perimeter Groundwater Results

ED_005025_00012563-00002

Site ST012 Activities Since August

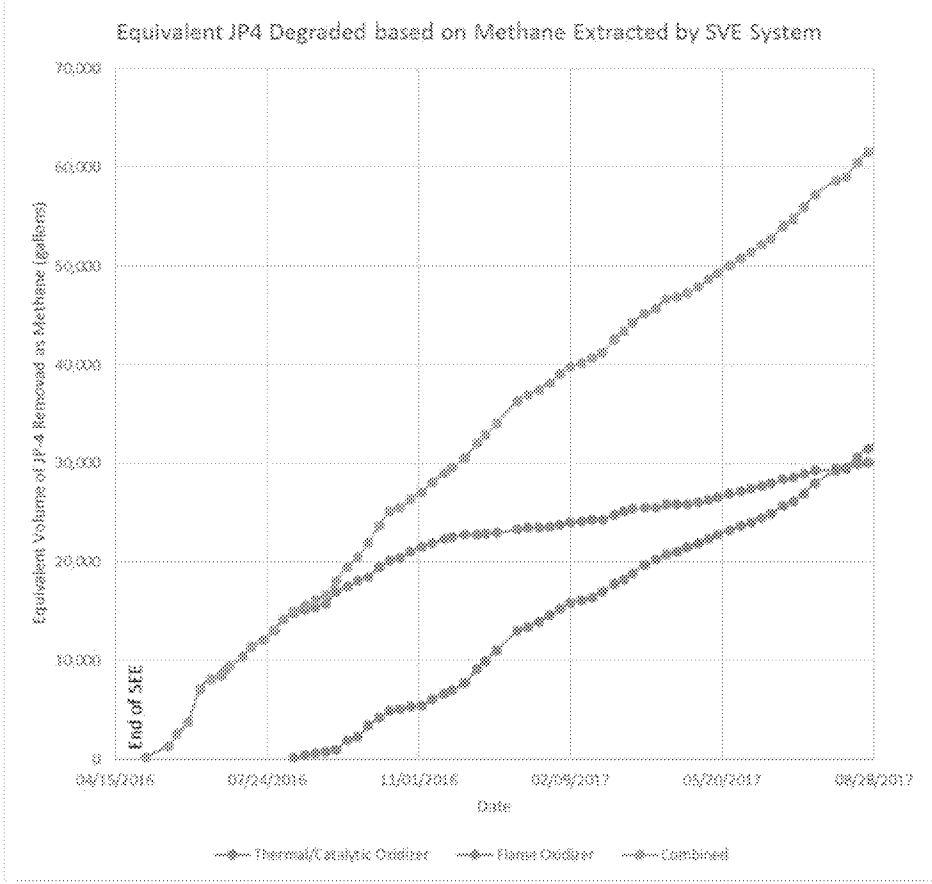
- Continued SVE operation
- Continued LNAPL screening in accessible SEE wells and Phase I characterization wells
- Pump testing on three containment wells
  - CZ: ST012-CZ07
  - UWBZ: ST012-UWBZ21
  - UWBZ/LSZ: ST012-UWBZ28/LSZ51

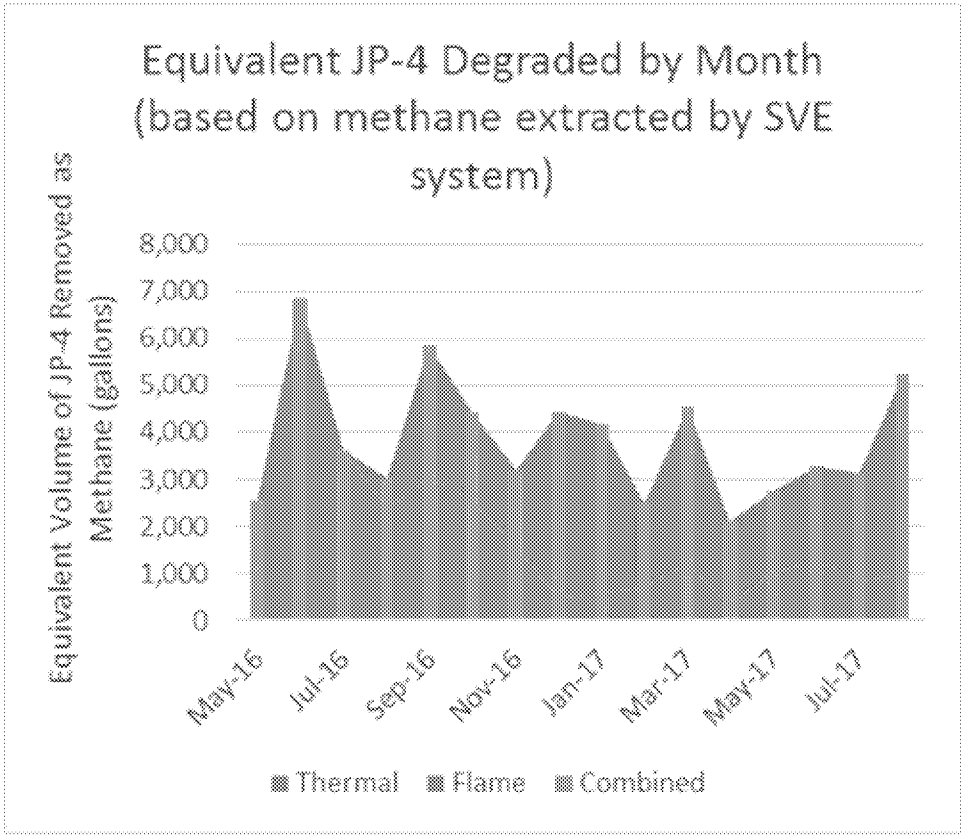
ED_005025_00012563-00003

JP-4 Degradation Based on Methane Removed with SVE (through 15 Sep 2017)

ED_005025_00012563-00004

Site ST012 SVE System Equivalent JP-4 Degradation Based on Methane Removed





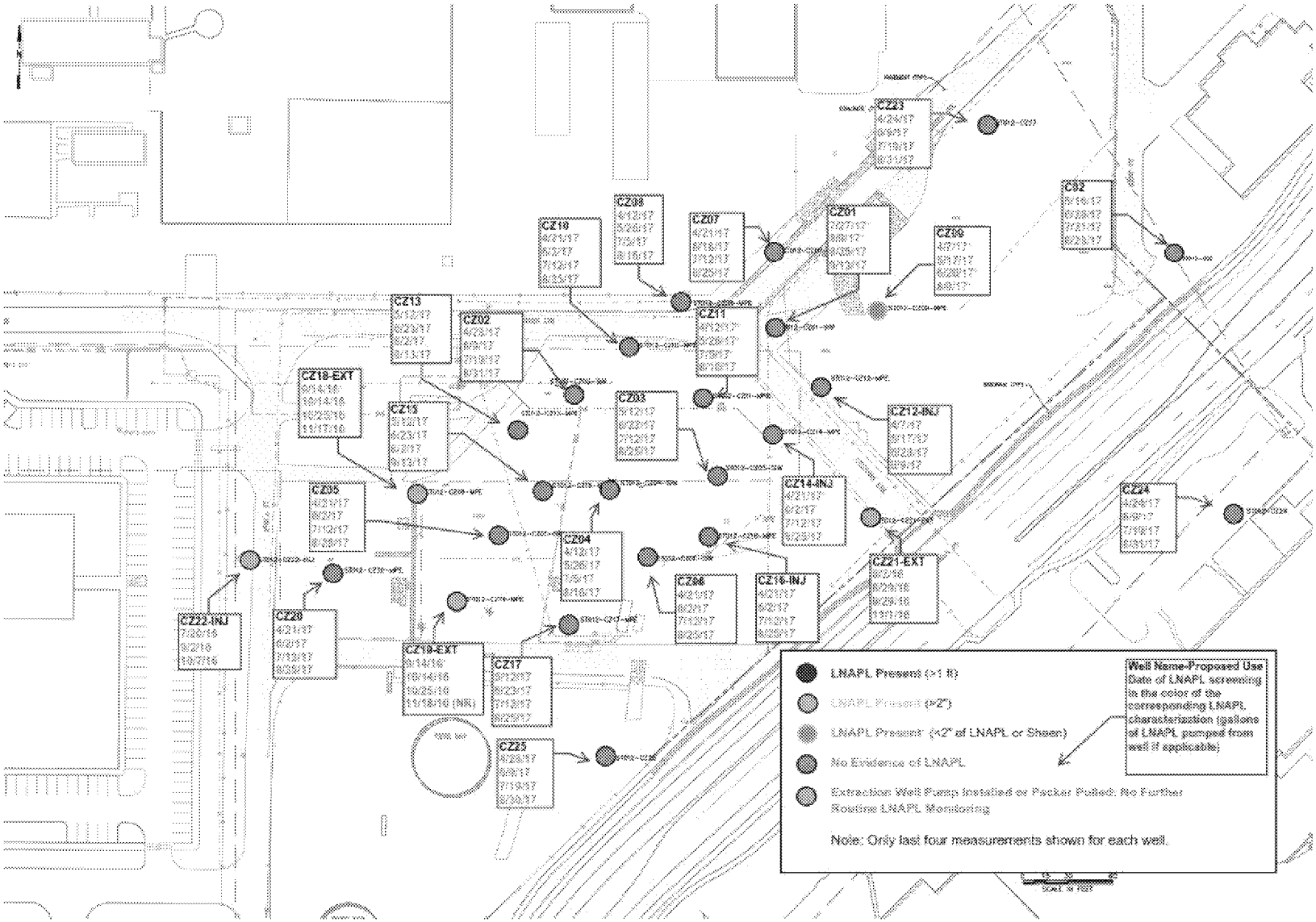
Methane increase in August related to an increase in extraction rate and concentration at the flameox following optimization to reduce dilution air

Estimated JP-4 degradation as methane is in addition to JP-4 removal reported for SVE

LNAPL Monitoring Update (through 15 Sep 2017)

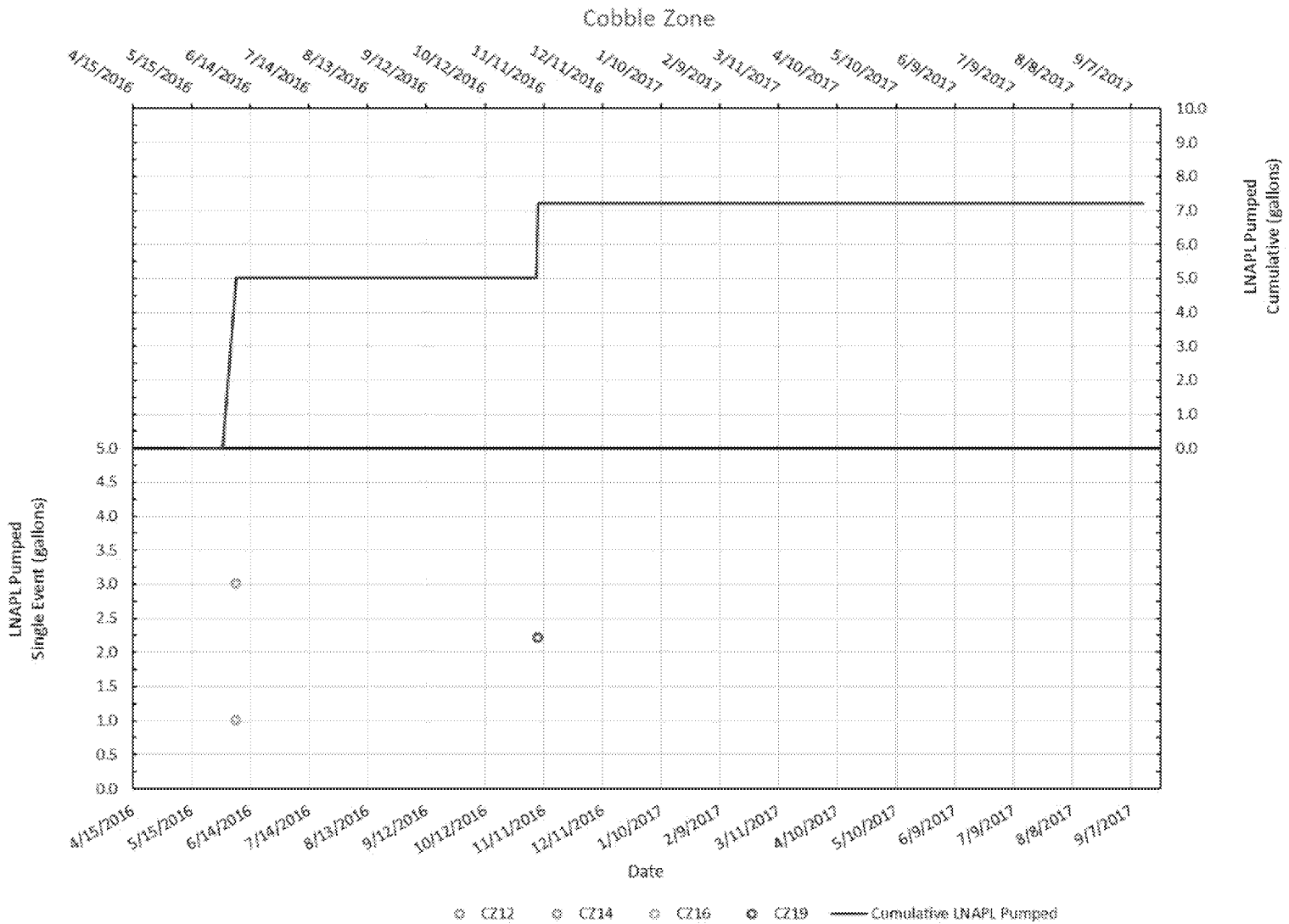
ED_005025_00012563-00006

LNAPL Monitoring/Removal Status
Cobble Zone



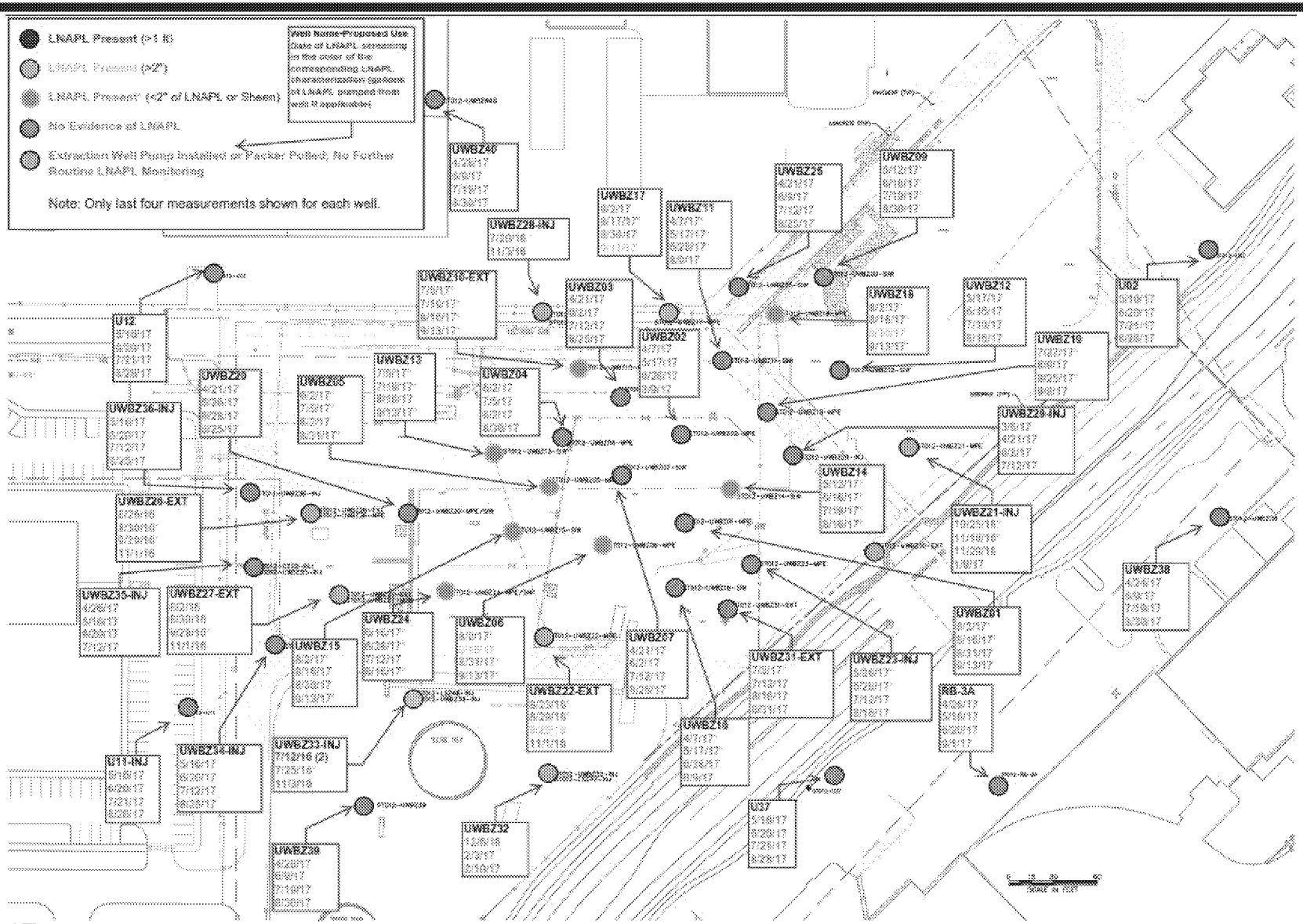
ED_005025_00012563-00007

LNAPL Monitoring/Removal Status
Cobble Zone



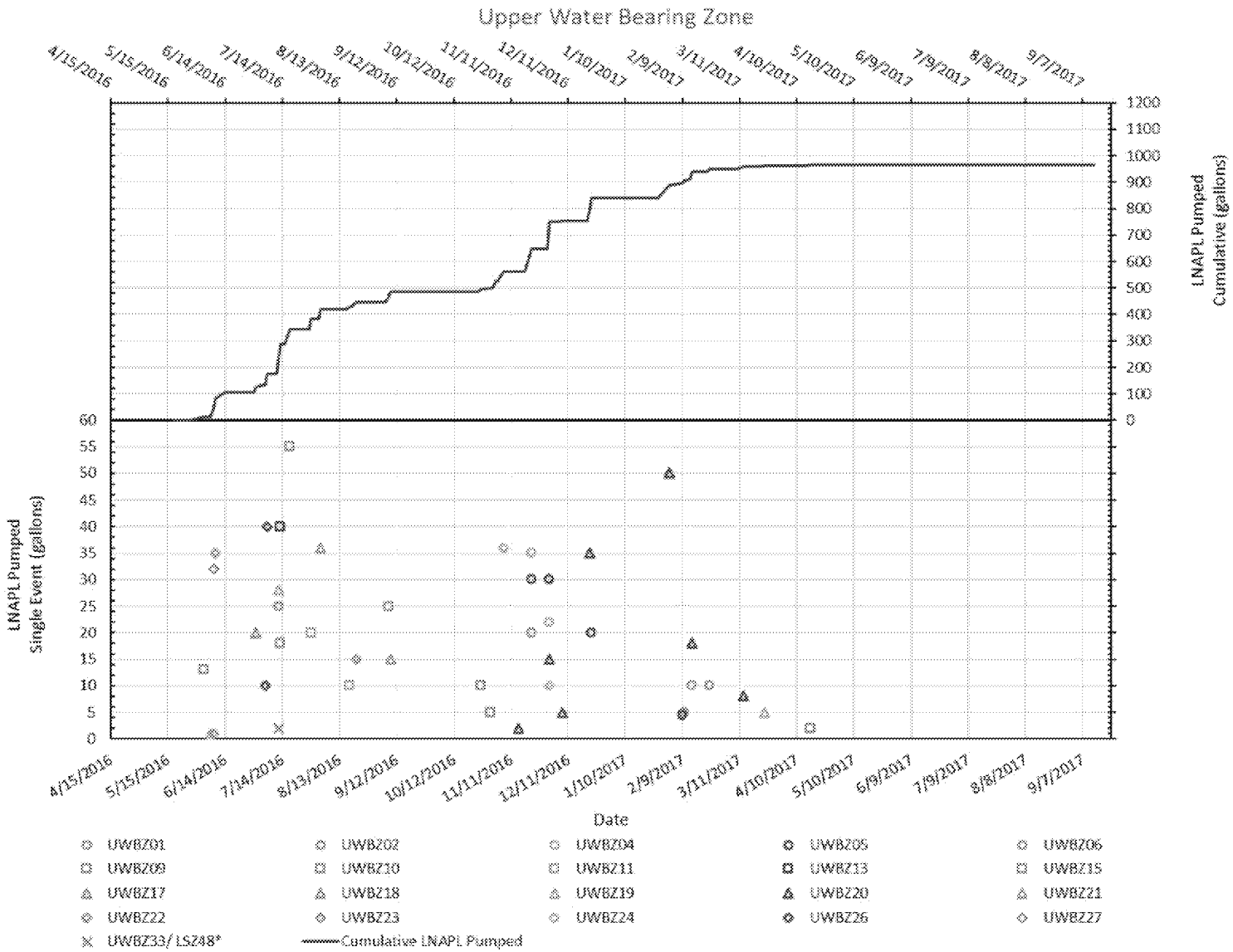
ED_005025_00012563-00008

LNAPL Monitoring/Removal Status
Upper Water Bearing Zone



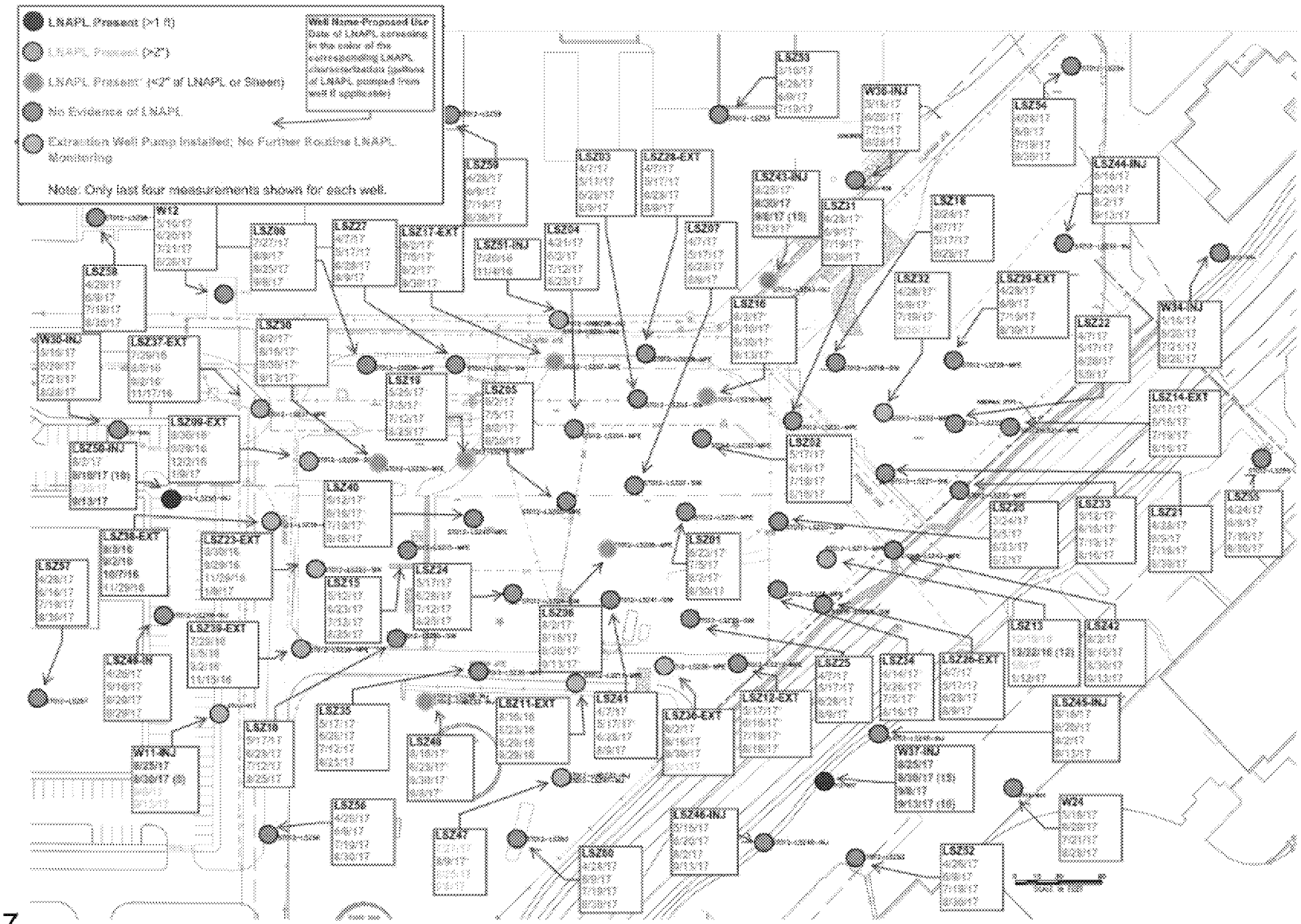
ED_005025_00012563-00009

LNAPL Monitoring/Removal Status
Upper Water Bearing Zone



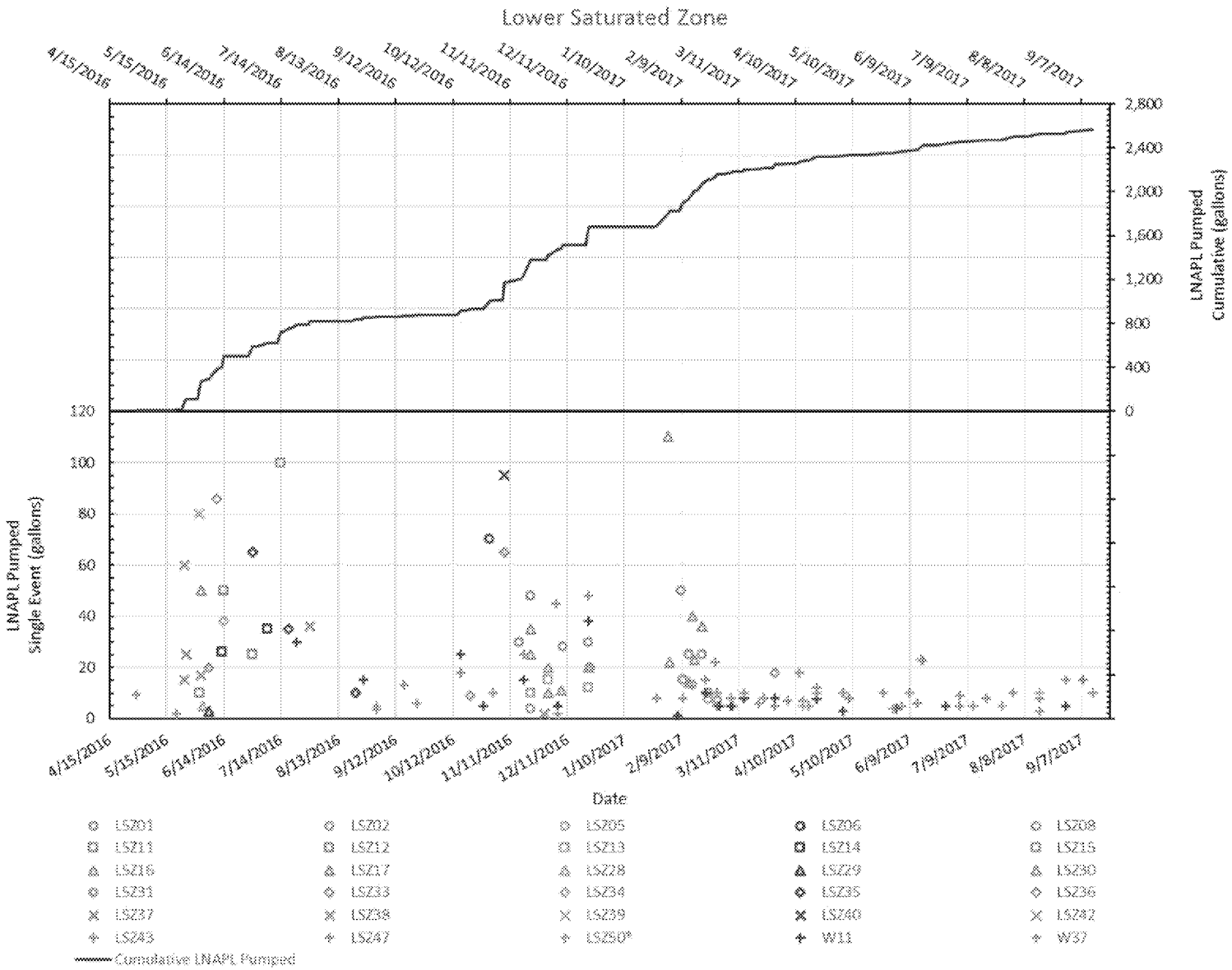
ED_005025_00012563-00010

LNAPL Monitoring/Removal Status
Lower Saturated Zone



ED_005025_00012563-00011

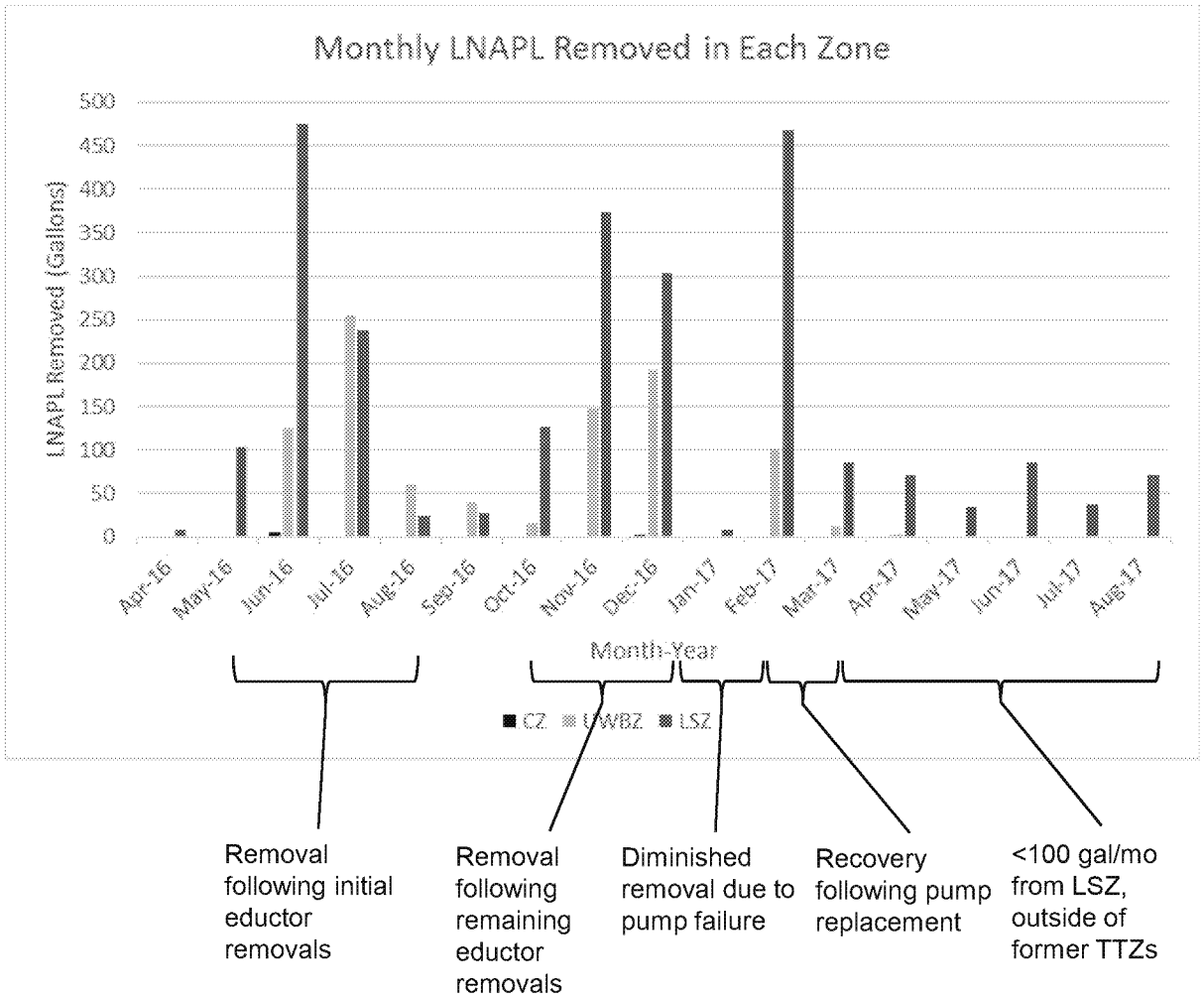
LNAPL Monitoring/Removal Status
Lower Saturated Zone



ED_005025_00012563-00012

ST012 LNAPL Monitoring/Removal Summary

- CZ – ~7 gallons of LNAPL removed. None since Nov 2016
- UWBZ - ~950 gallons of LNAPL removed. None since Apr 2017.
- LSZ - ~2,570 gallons of LNAPL removed. ~70 gallons removed since Aug 2017 update. All LNAPL removed since Aug 2017 update from wells outside TTZ perimeter (W11,W37, LSZ43, LSZ50).

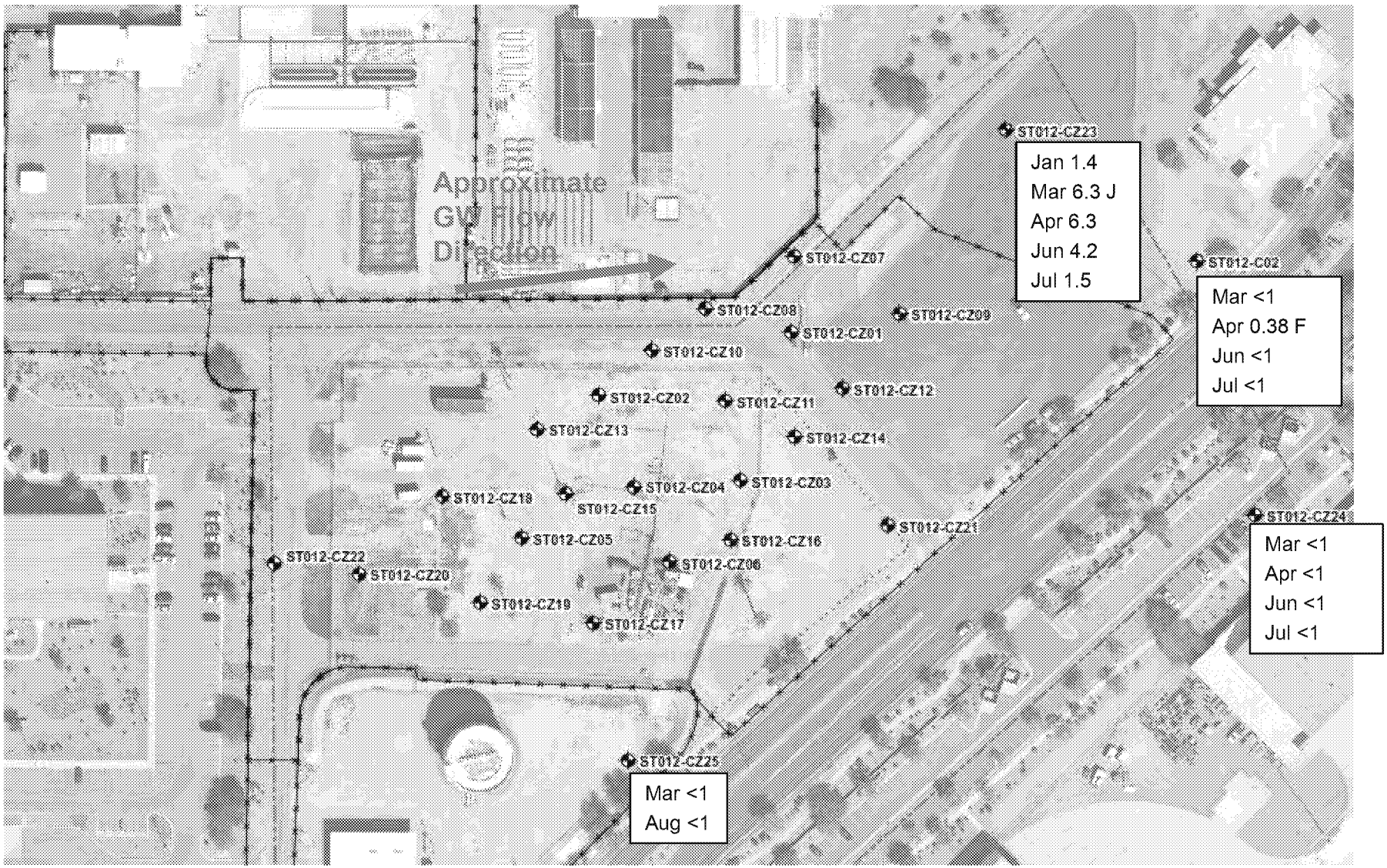


ED_005025_00012563-00013

Perimeter Groundwater Concentrations (2017 through Jul/early Aug)

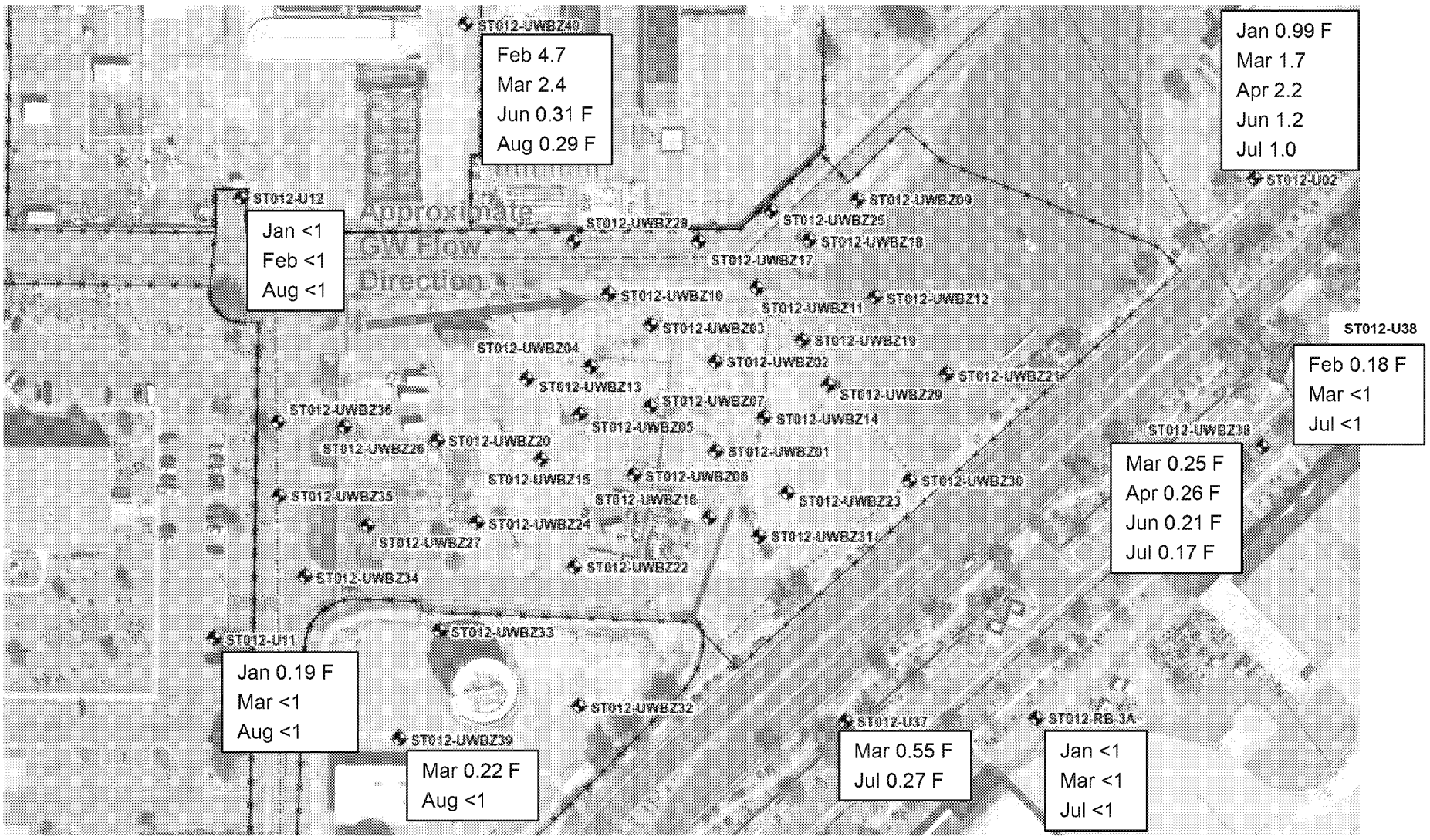
ED_005025_00012563-00014

Site ST012 CZ Perimeter Benzene Groundwater Results (µg/L)



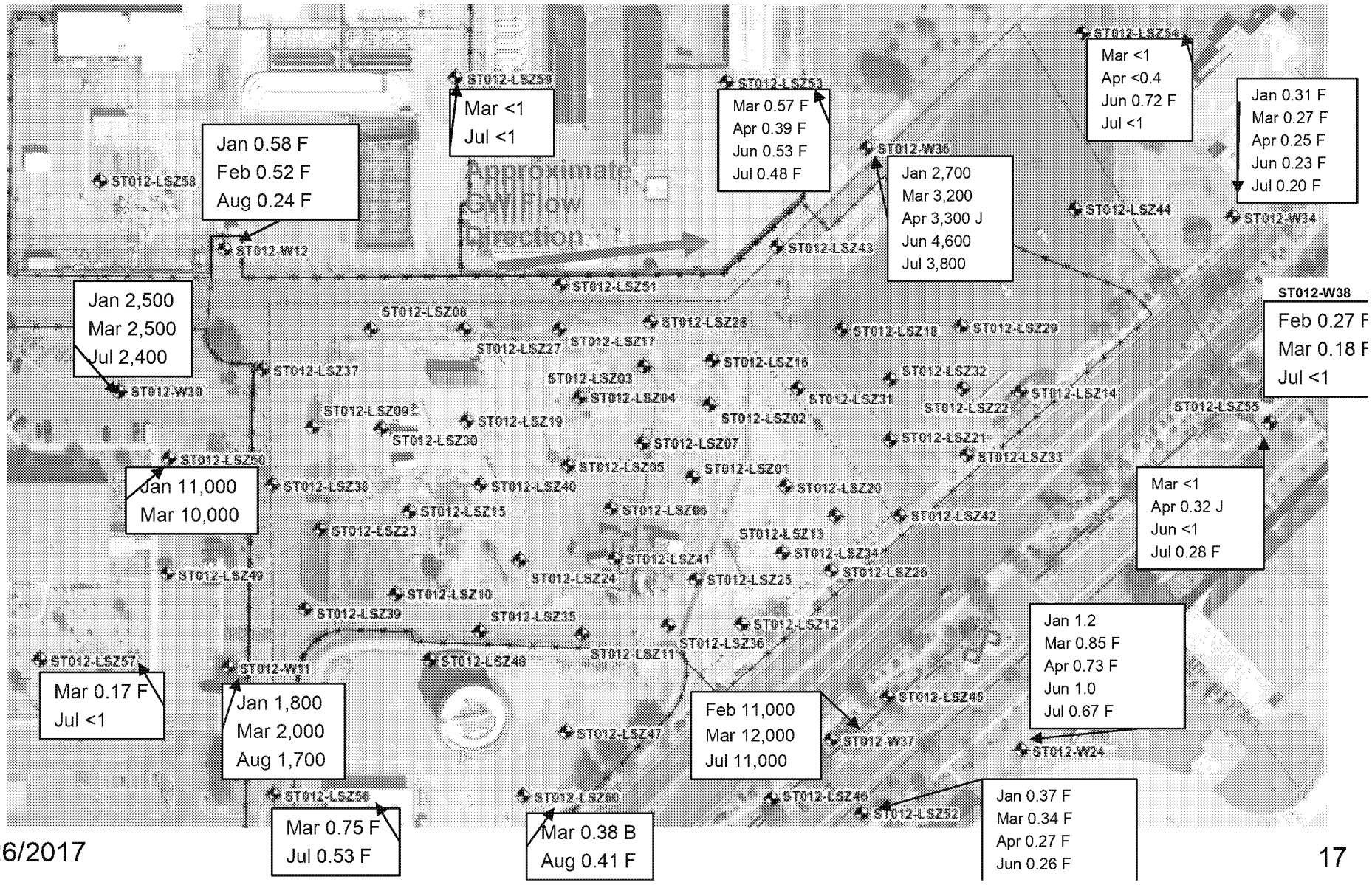
ED_005025_00012563-00015

Site ST012 UWBZ Perimeter Benzene Groundwater Results (µg/L)



ED_005025_00012563-00016

Site ST012 LSZ Perimeter Benzene Groundwater Results (µg/L)



ED_005025_00012563-00017