Air Force Civil Engineer Center

FORMER
WILLIAMS AIR FORCE BASE

Site ST012

Former Liquid Fuel Storage Area

BCT Update

15 February 2018

ED_005025_00007762-00001

Site ST012 Outline

- Summary of Activities Since January BCT update
- SVE Update
- LNAPL Monitoring/Removal Update
- Path Forward

ED_005025_00007762-00002

Site ST012 Activities Since January

- Continued SVE operation
- Continued LNAPL screening in accessible SEE wells and Phase I characterization wells

ED_005025_00007762-00003

Soil Vapor Extraction System Update

ED_005025_00007762-00004

ST012 SVE System Update

- **Oct – Dec 2017**
  - 98.4% operational uptime Thermox; 94.1% operational uptime Flamox
  - Total petroleum hydrocarbon (TPH) removed – 31,669 pounds or 4,820 gallons

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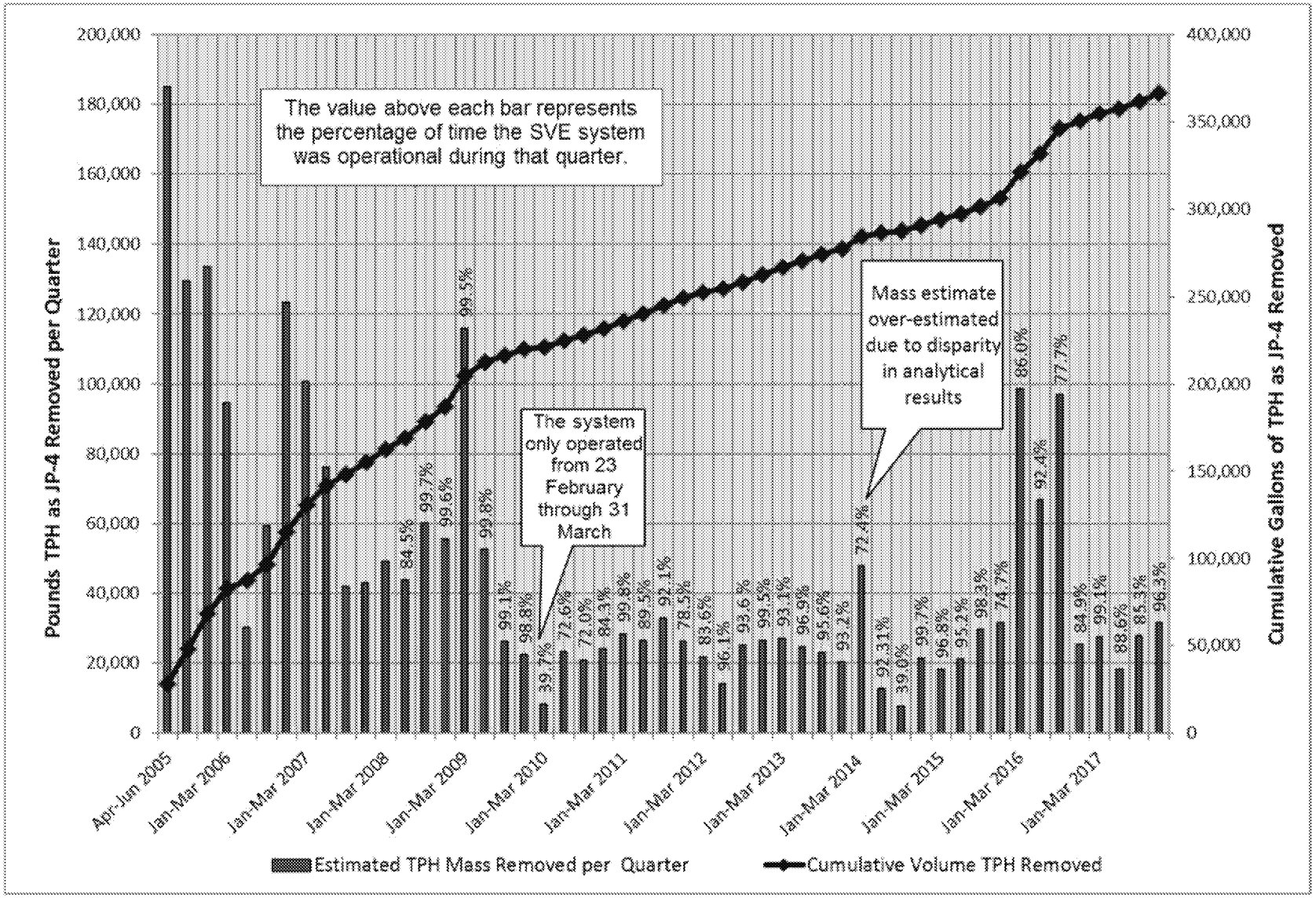
Site ST012 SVE System Performance



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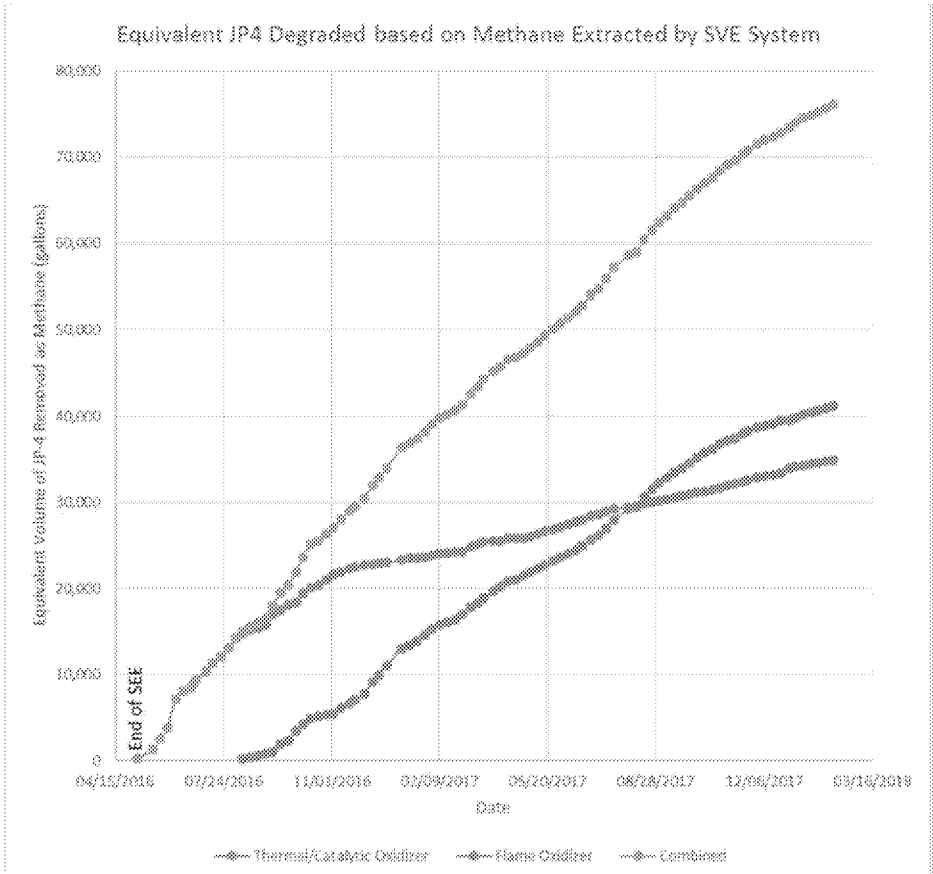
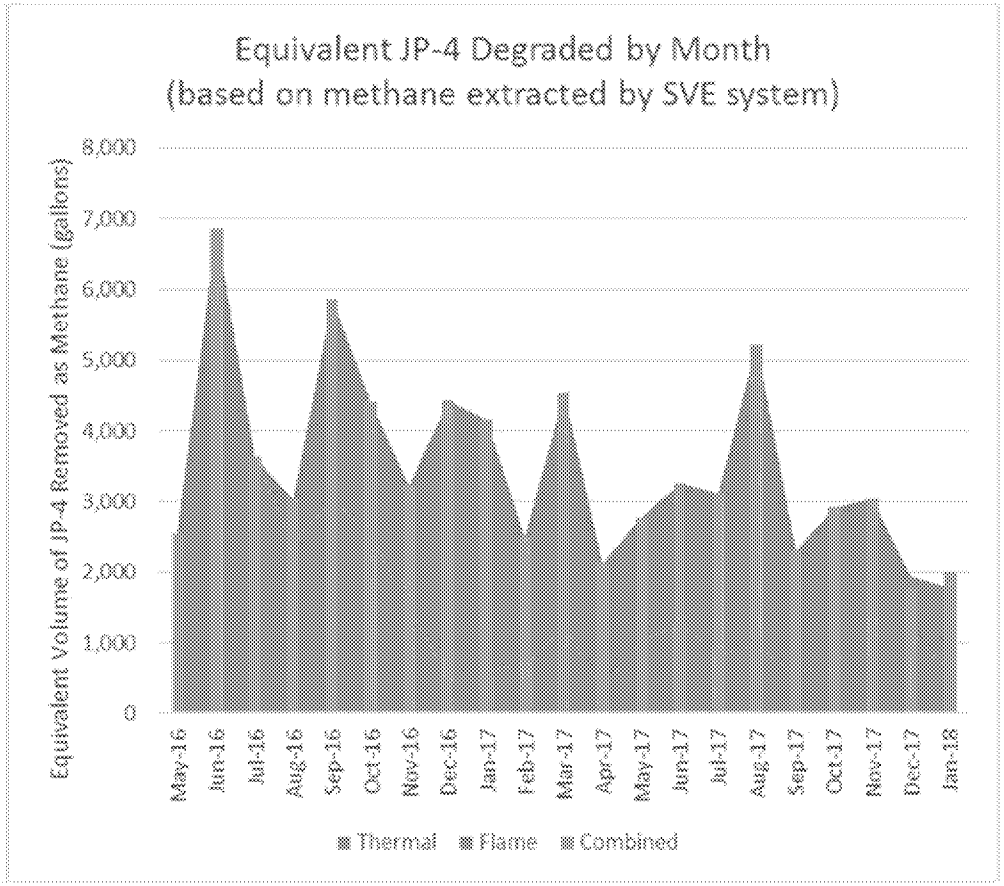
Site ST012 SVE System Equivalent JP-4 Degradation Based on Methane Removed





Estimates through 8 Feb 2018.

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

Extraction volume reduced in last week of December due to oxidizer shutdowns

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LNAPL Monitoring Update (through 8 Feb)

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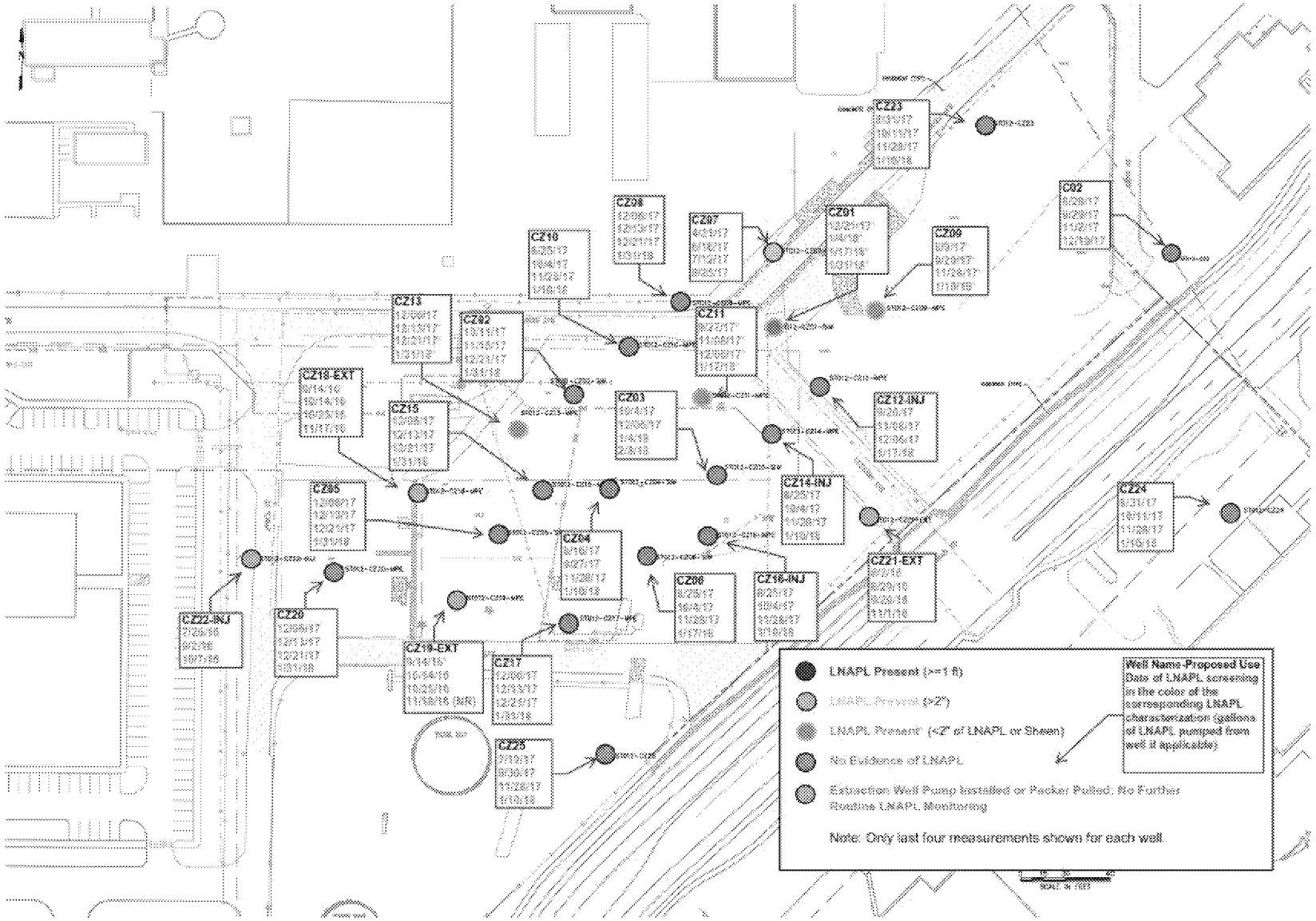
LNAPL Monitoring/Removal Status
Cobble Zone



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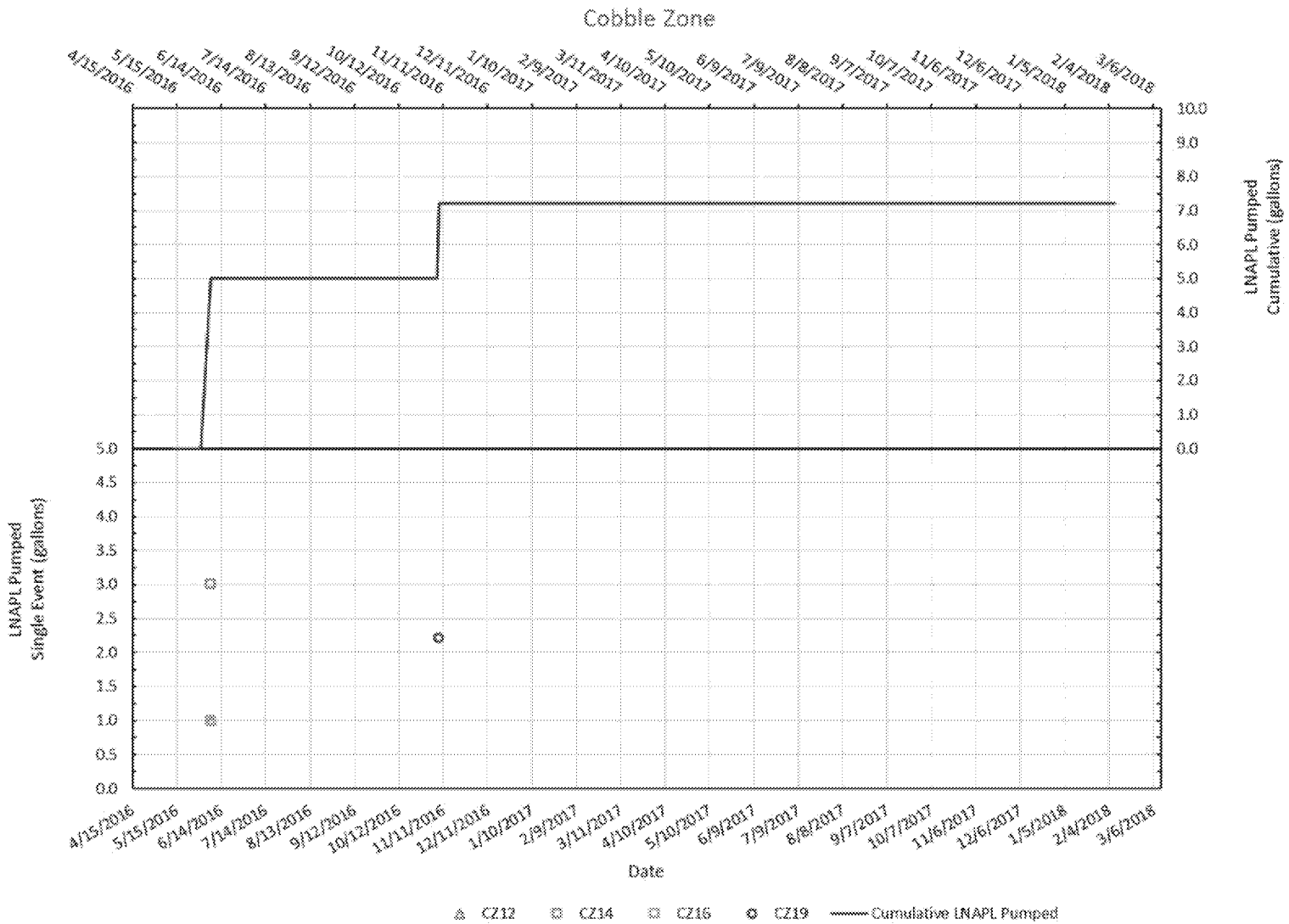
LNAPL Monitoring/Removal Status
Cobble Zone



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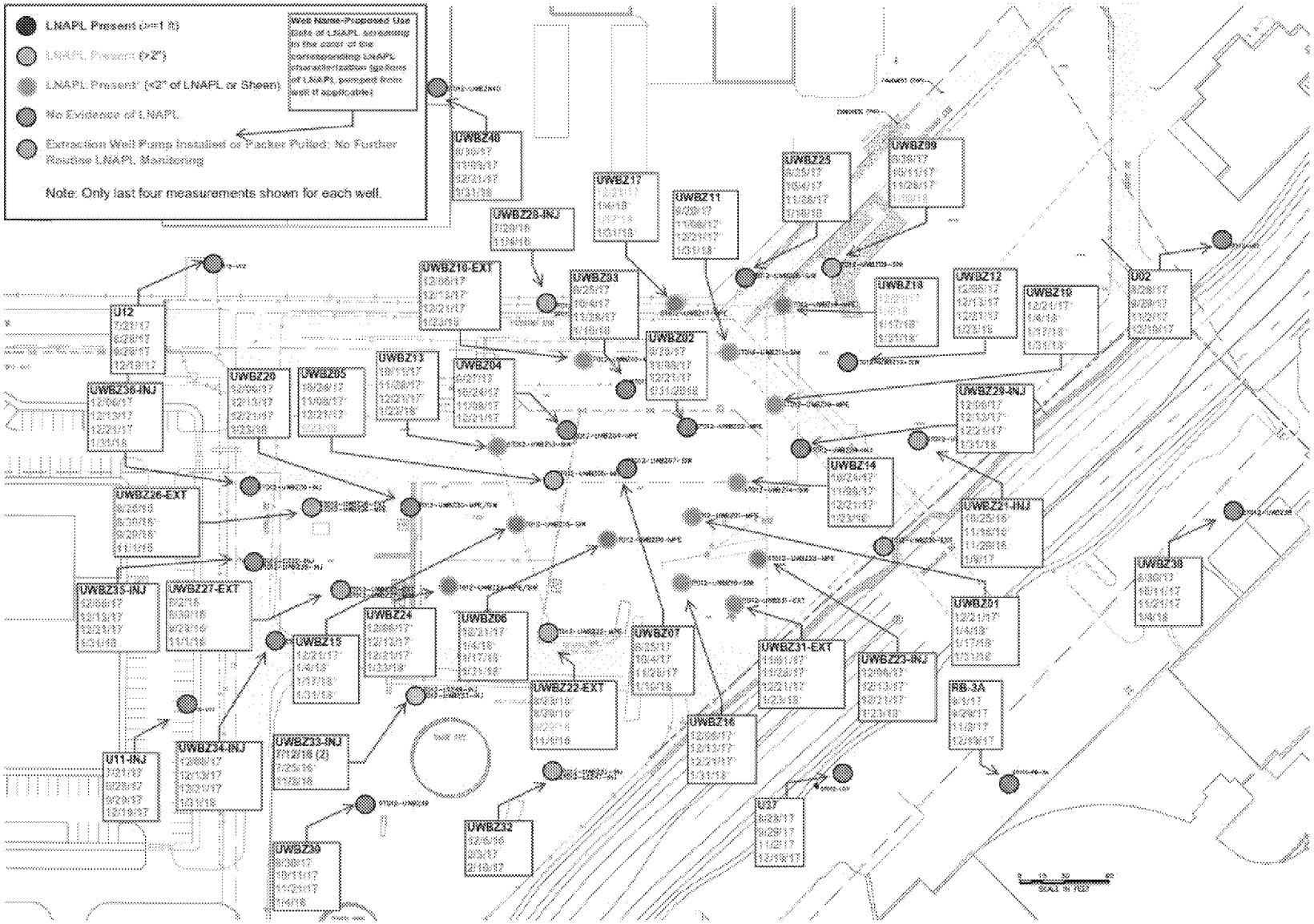
LNAPL Monitoring/Removal Status
Upper Water Bearing Zone



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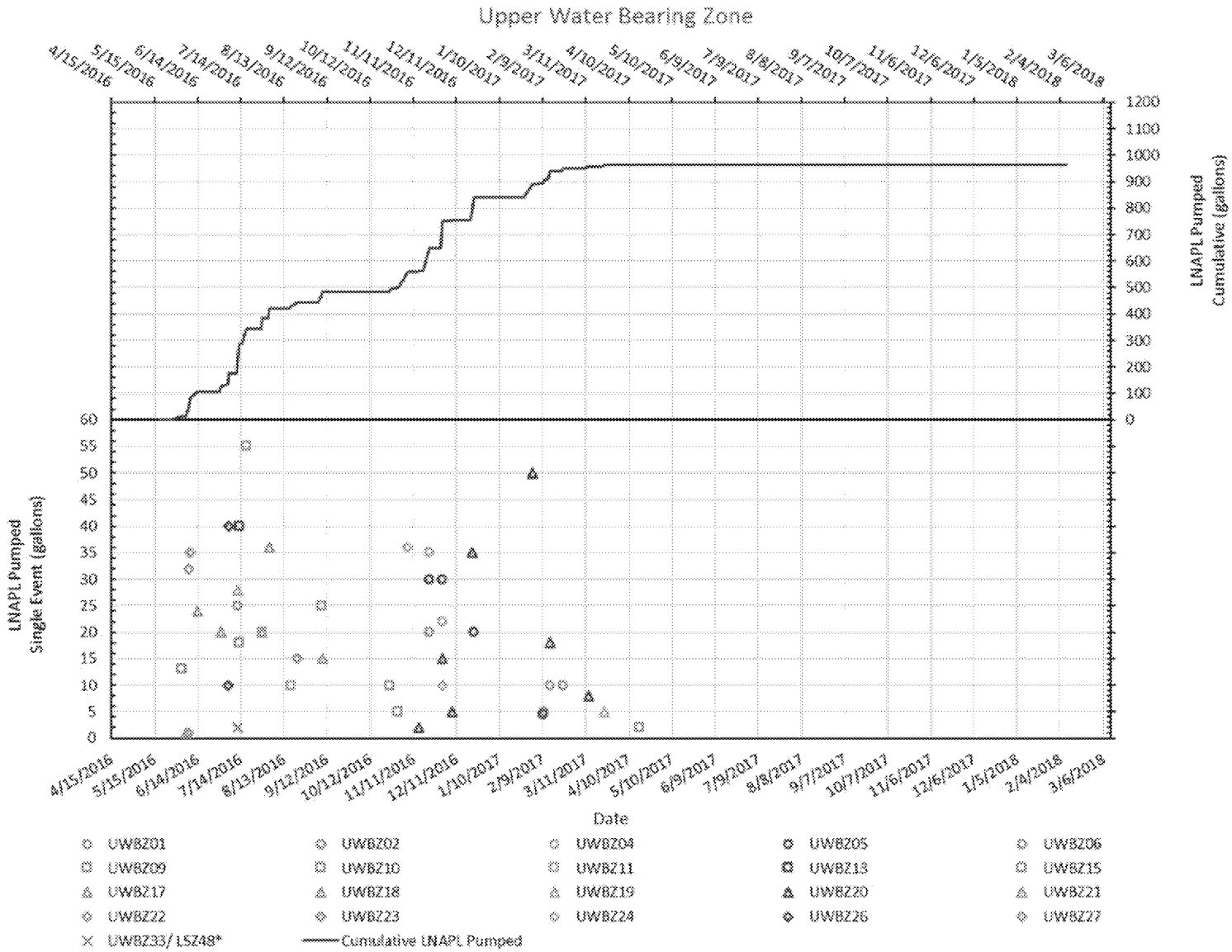
LNAPL Monitoring/Removal Status
Upper Water Bearing Zone



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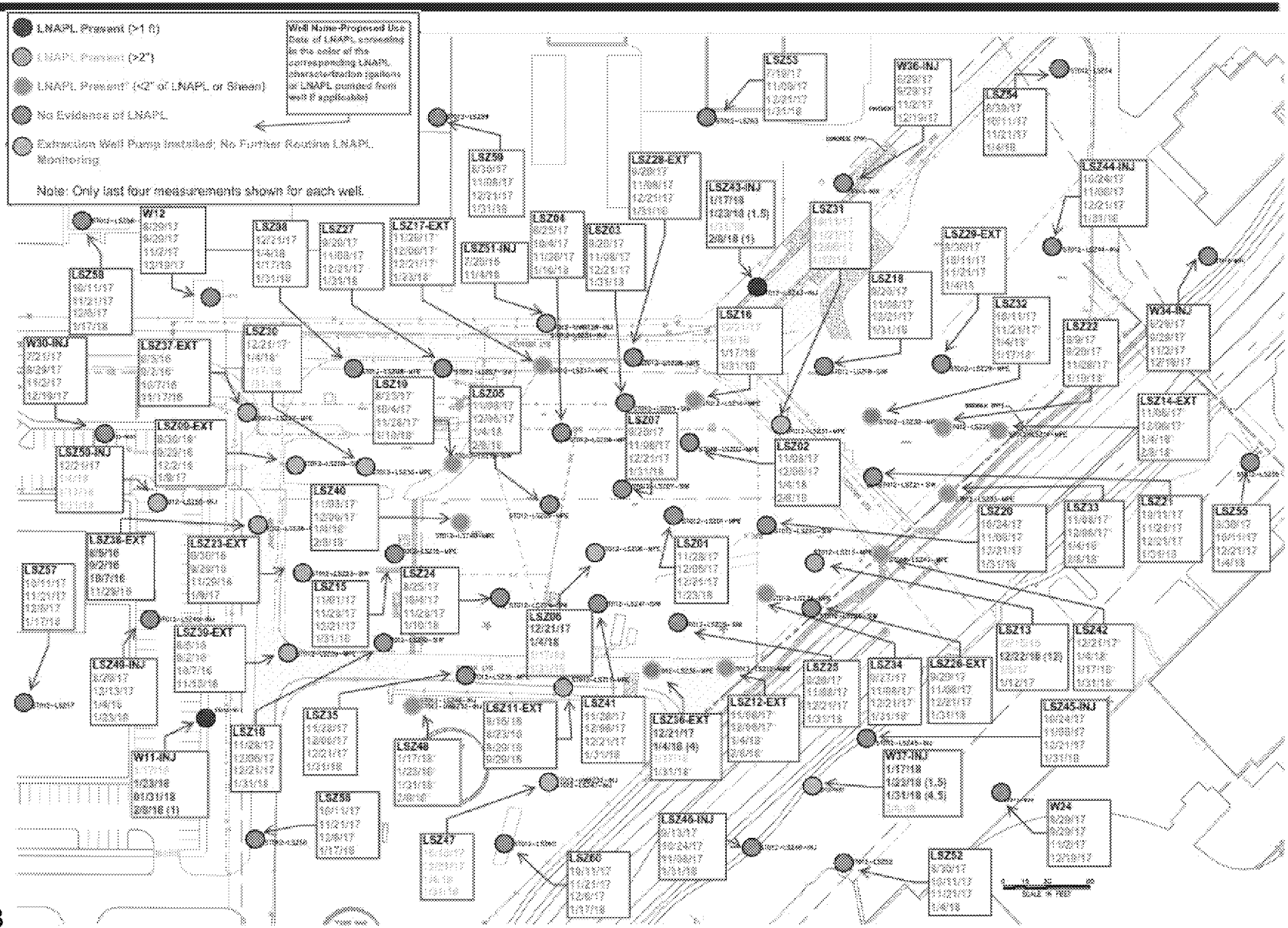
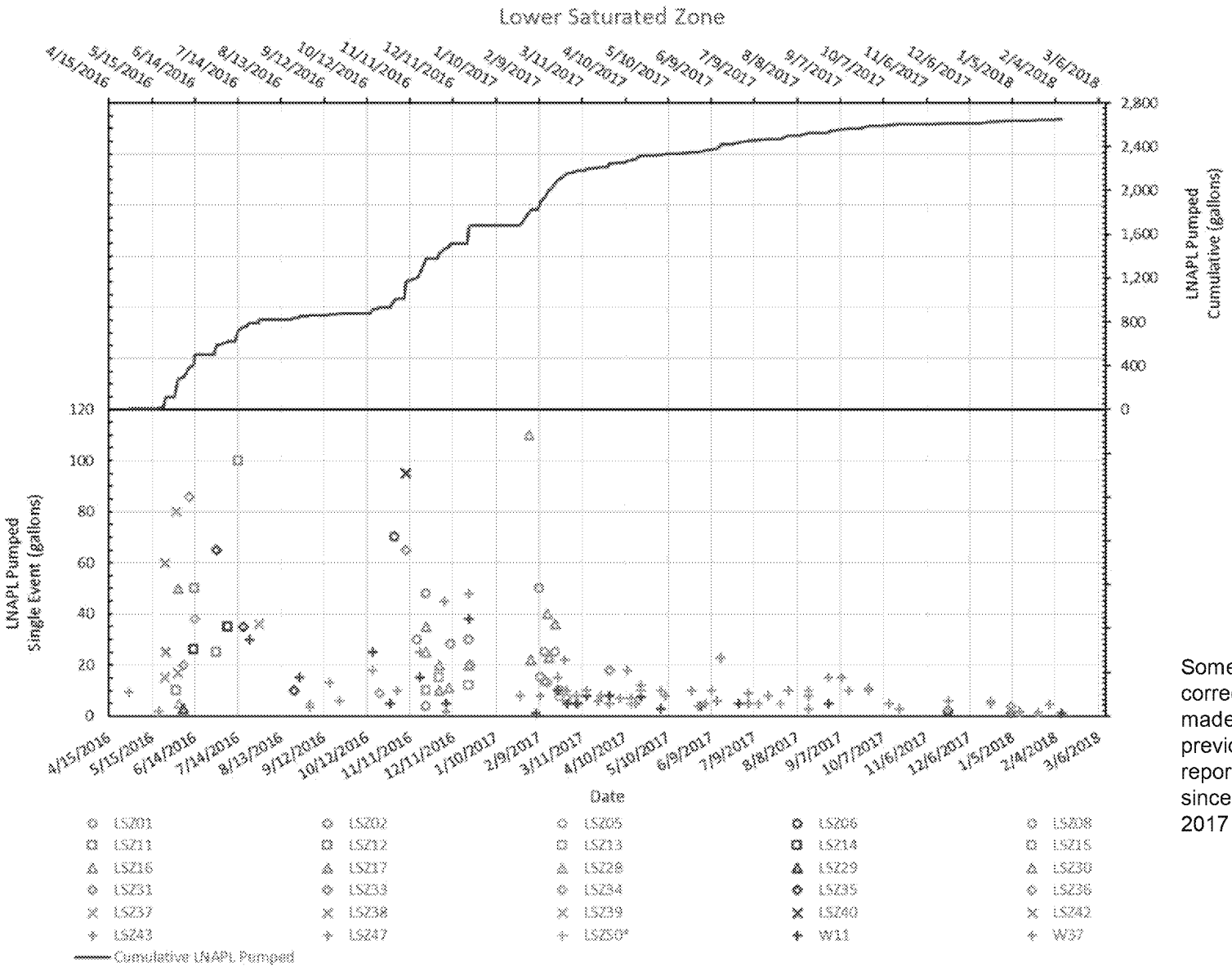
LNAPL Monitoring/Removal Status
Lower Saturated Zone



LNAPL Monitoring/Removal Status
Lower Saturated Zone



Some corrections made to previously reported values since August 2017

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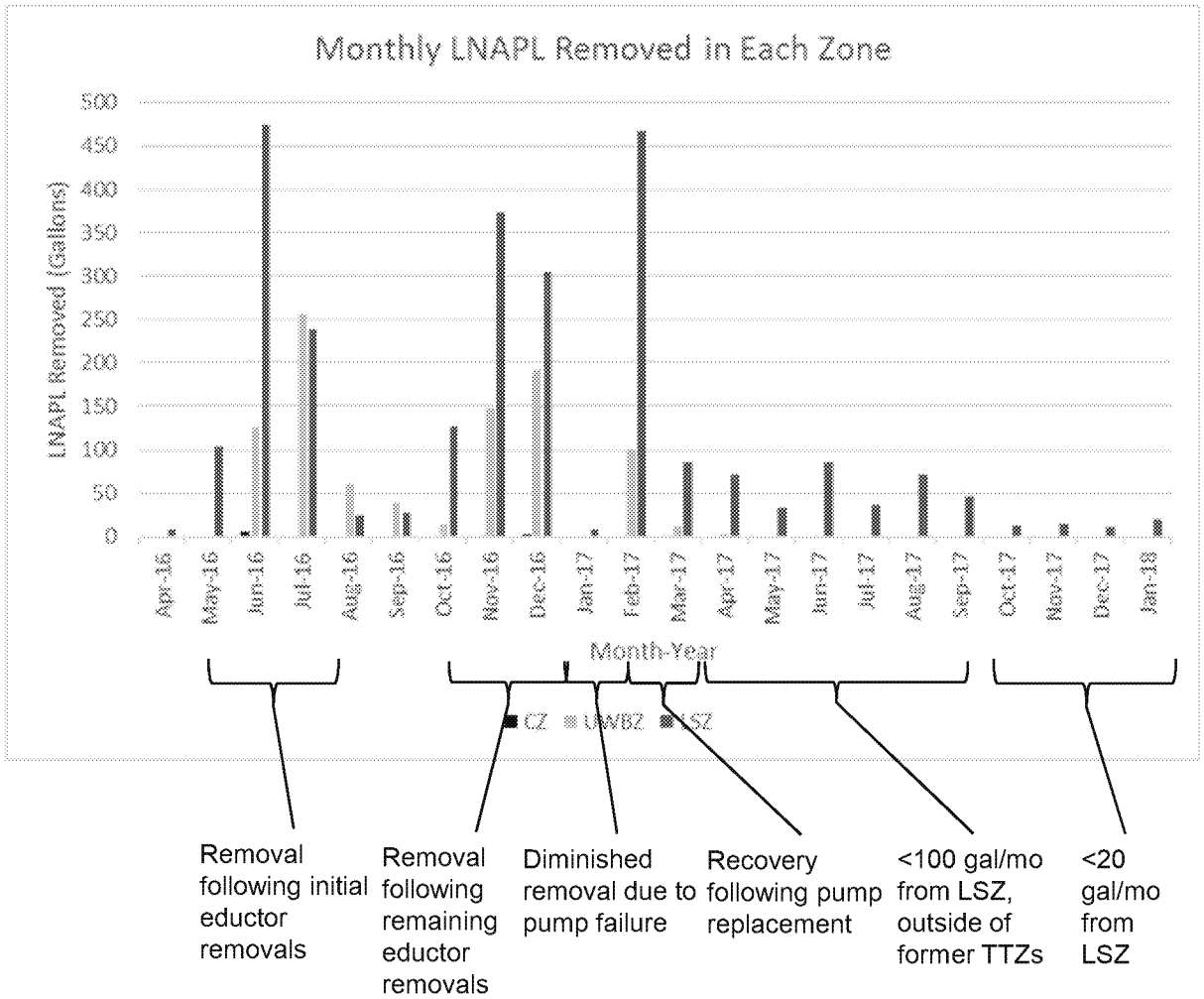
ST012 LNAPL Monitoring/Removal Summary

- CZ – 7 gallons of LNAPL removed. None since Nov 2016
- UWBZ - 964 gallons of LNAPL removed. None since Apr 2017.
- LSZ - 2,653 gallons of LNAPL removed. (89 gallons subtracted from previously reported totals based on QC for quarterly reporting). 20 gallons removed since Jan 2018 update (W11, W37, LSZ36, LSZ43).



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Site ST012 Activities Feb-Mar

- Continued SVE operation
- Continued LNAPL screening in accessible SEE wells and Phase I characterization wells
- Complete and finalize pilot study implementation work plan

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