Air Force Civil Engineer Center

FORMER
WILLIAMS AIR FORCE BASE

Site ST012
Former Liquid Fuel Storage Area

BCT Update

14 December 2017

ED_005025_00012020-00001

Site ST012 Outline

- Summary of Activities Since November BCT update
- Update on JP-4 degradation based on methane at SVE system
- LNAPL Monitoring/Removal Update
- Preliminary Annual Groundwater Monitoring Results

ED_005025_00012020-00002

Site ST012 Activities Since October

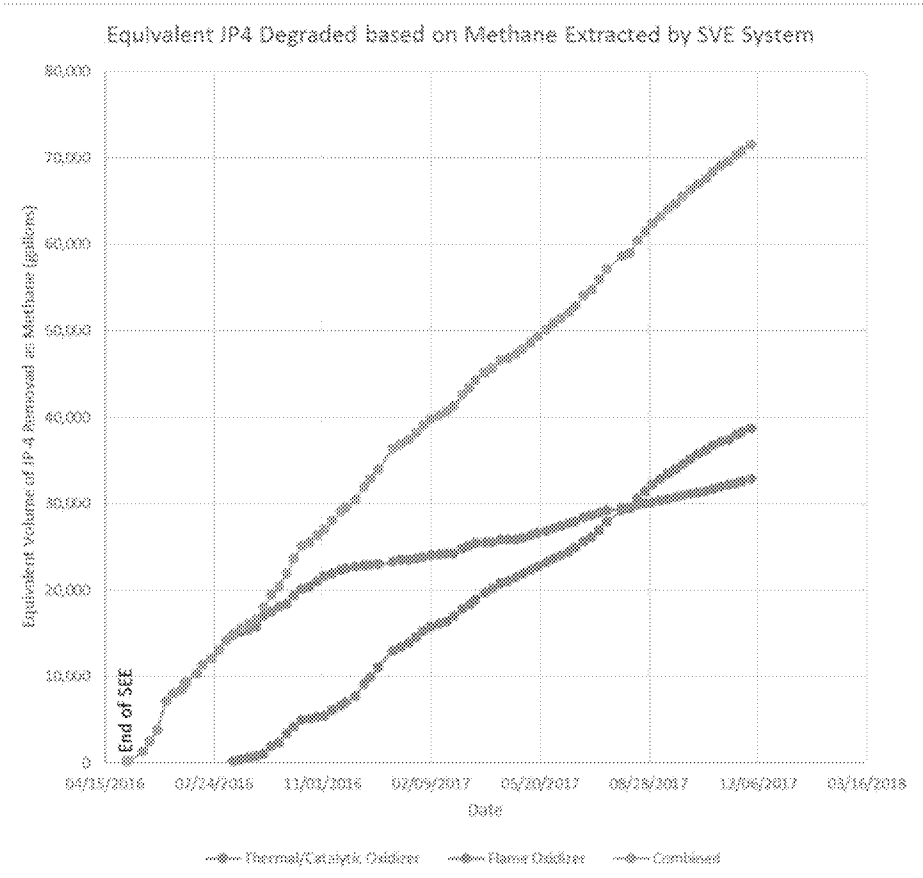
- Continued SVE operation
- Continued LNAPL screening in accessible SEE wells and Phase I characterization wells
- Perimeter groundwater samples collected (partial results available)

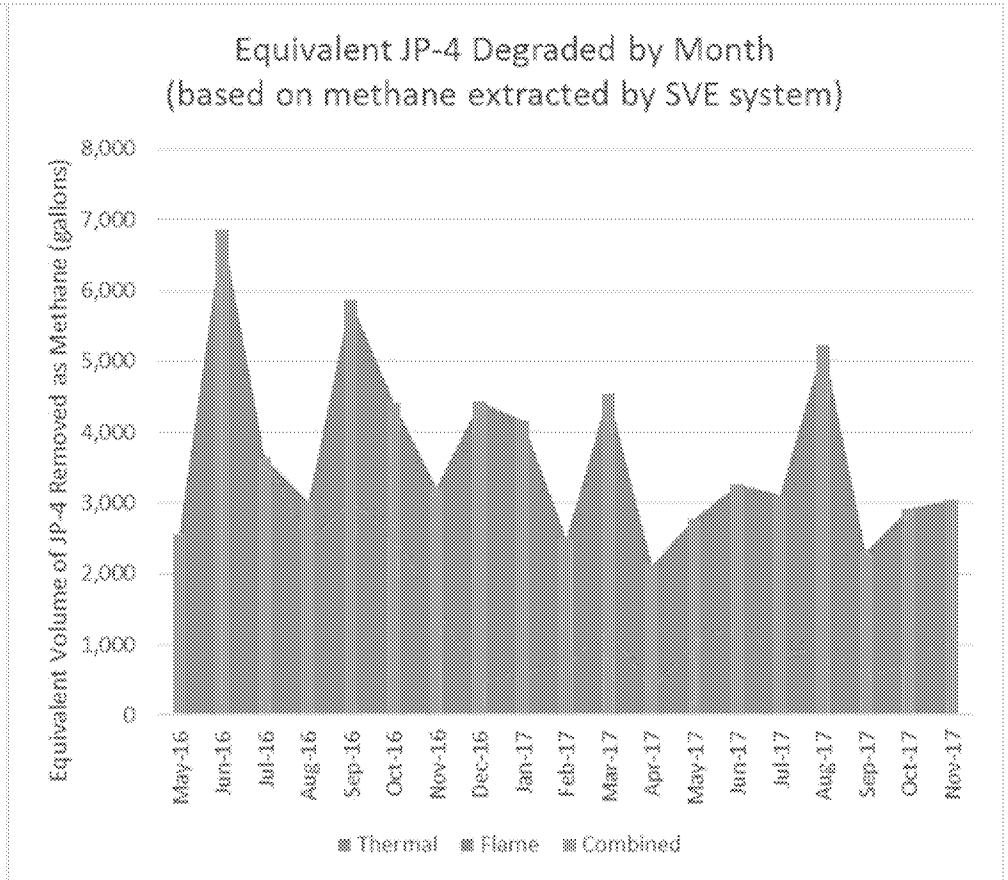
ED_005025_00012020-00003

JP-4 Degradation Based on Methane Removed with SVE (through 1 Dec)

ED_005025_00012020-00004

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





Estimates through 30 Nov 2017

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

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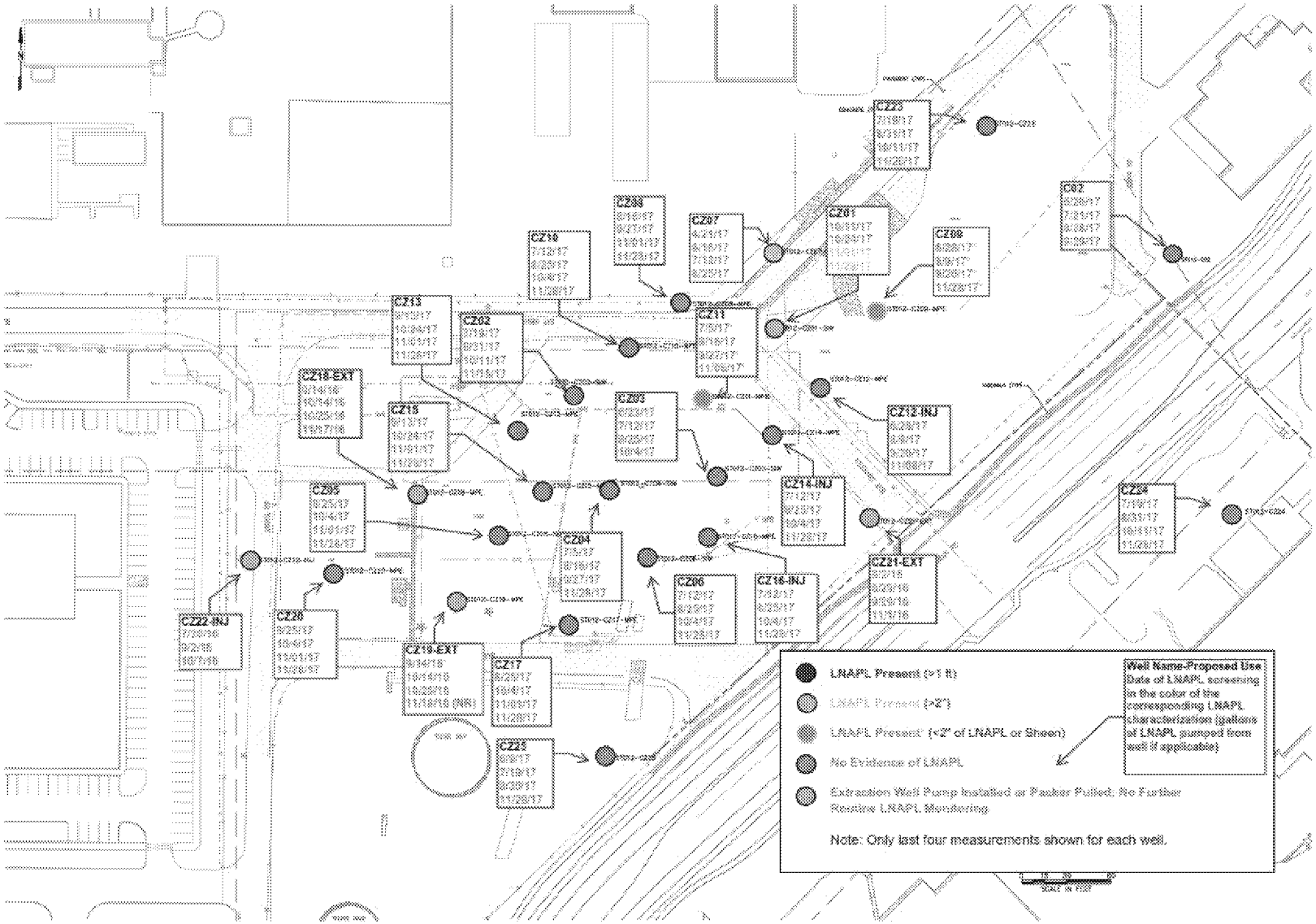
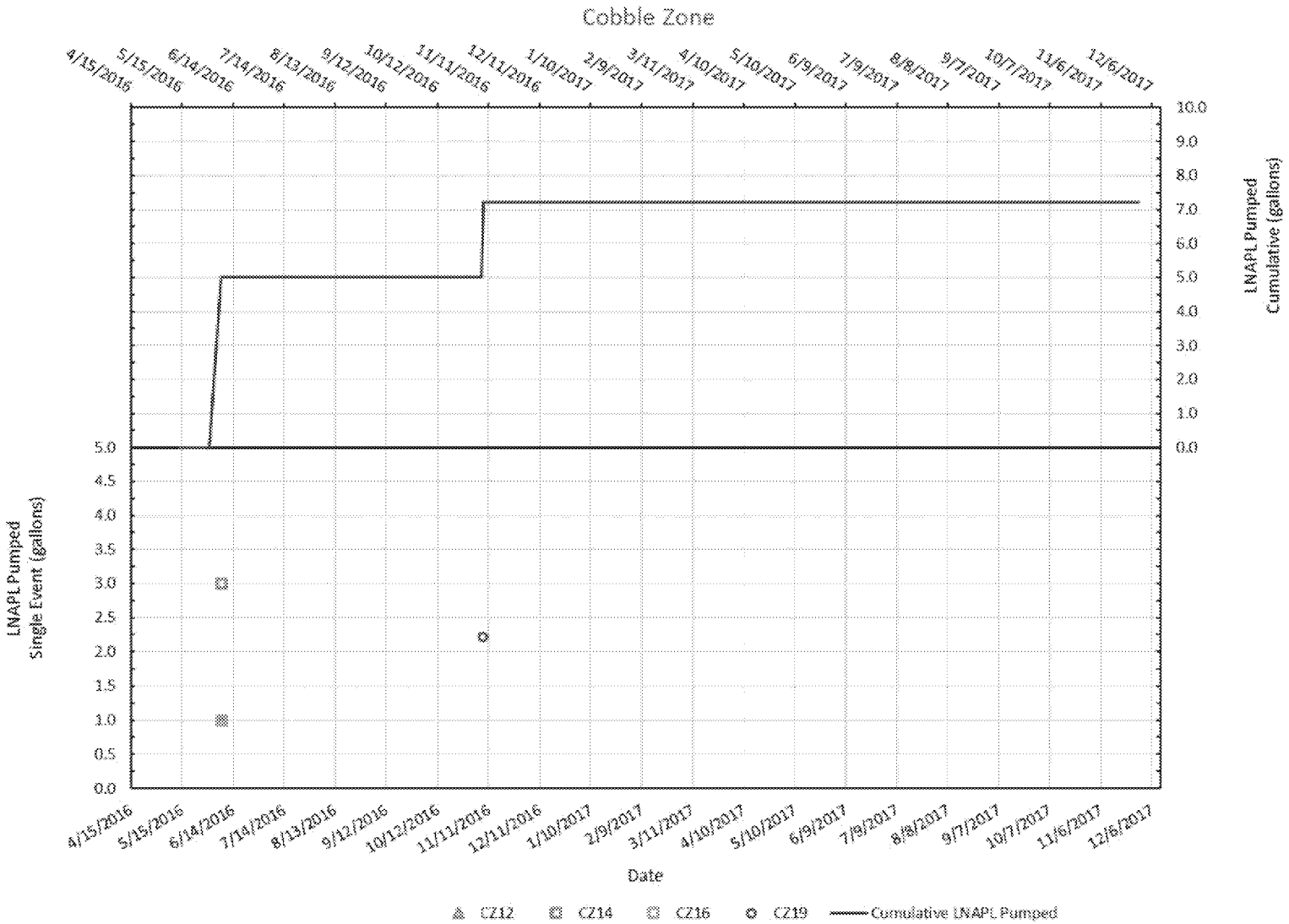
LNAPL Monitoring Update (through 1 Dec)

ED_005025_00012020-00006

LNAPL Monitoring/Removal Status
Cobble Zone



LNAPL Monitoring/Removal Status
Cobble Zone



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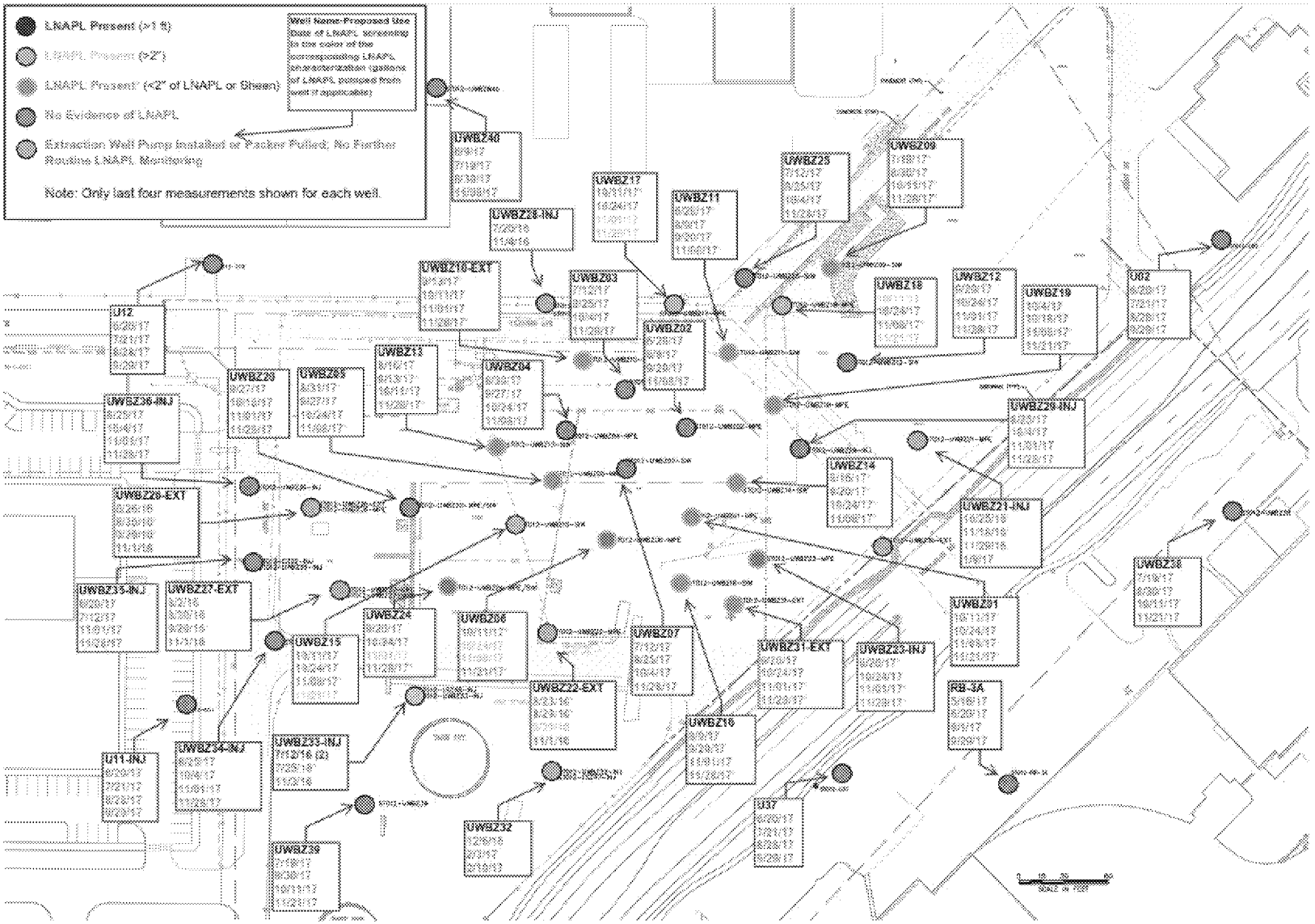
LNAPL Monitoring/Removal Status
Upper Water Bearing Zone



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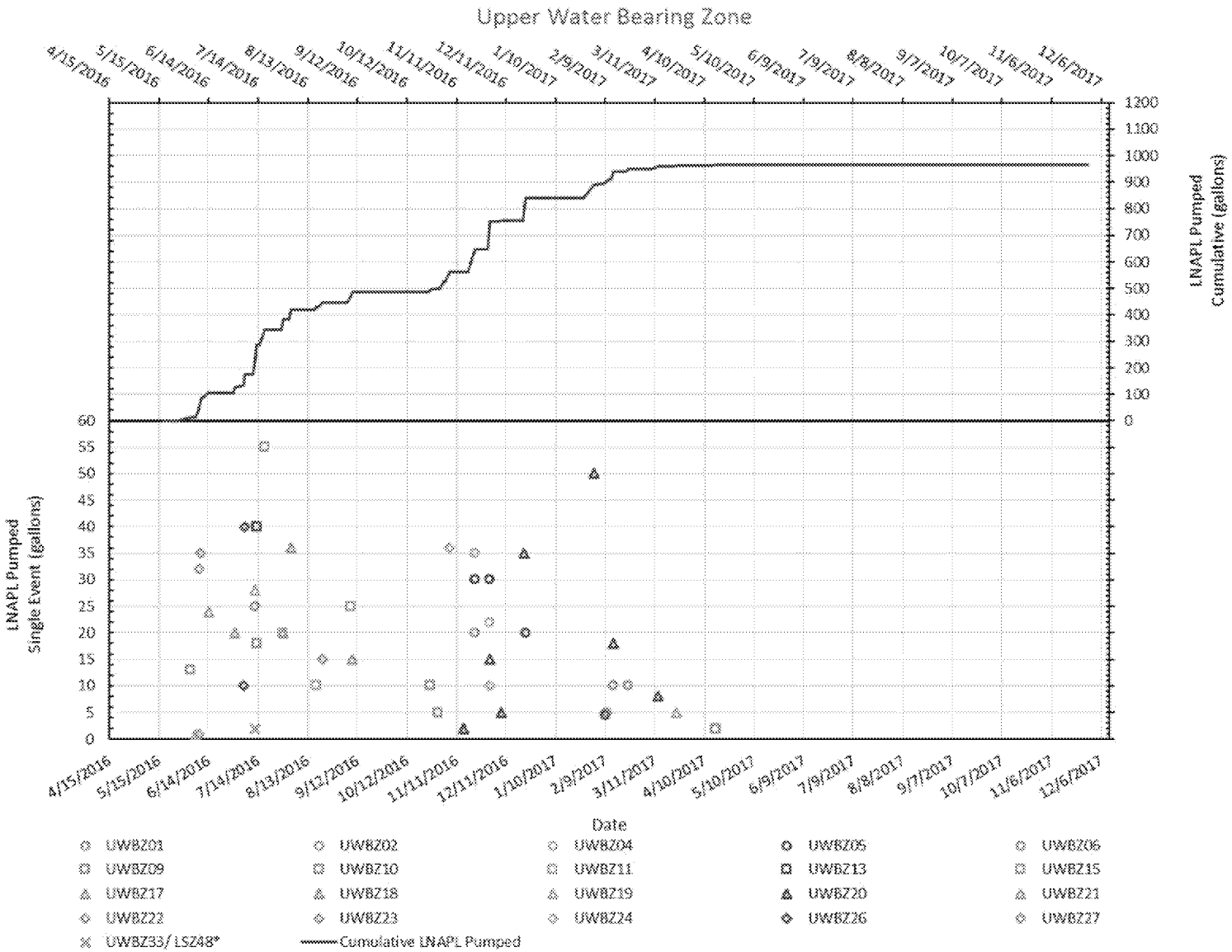
LNAPL Monitoring/Removal Status
Upper Water Bearing Zone



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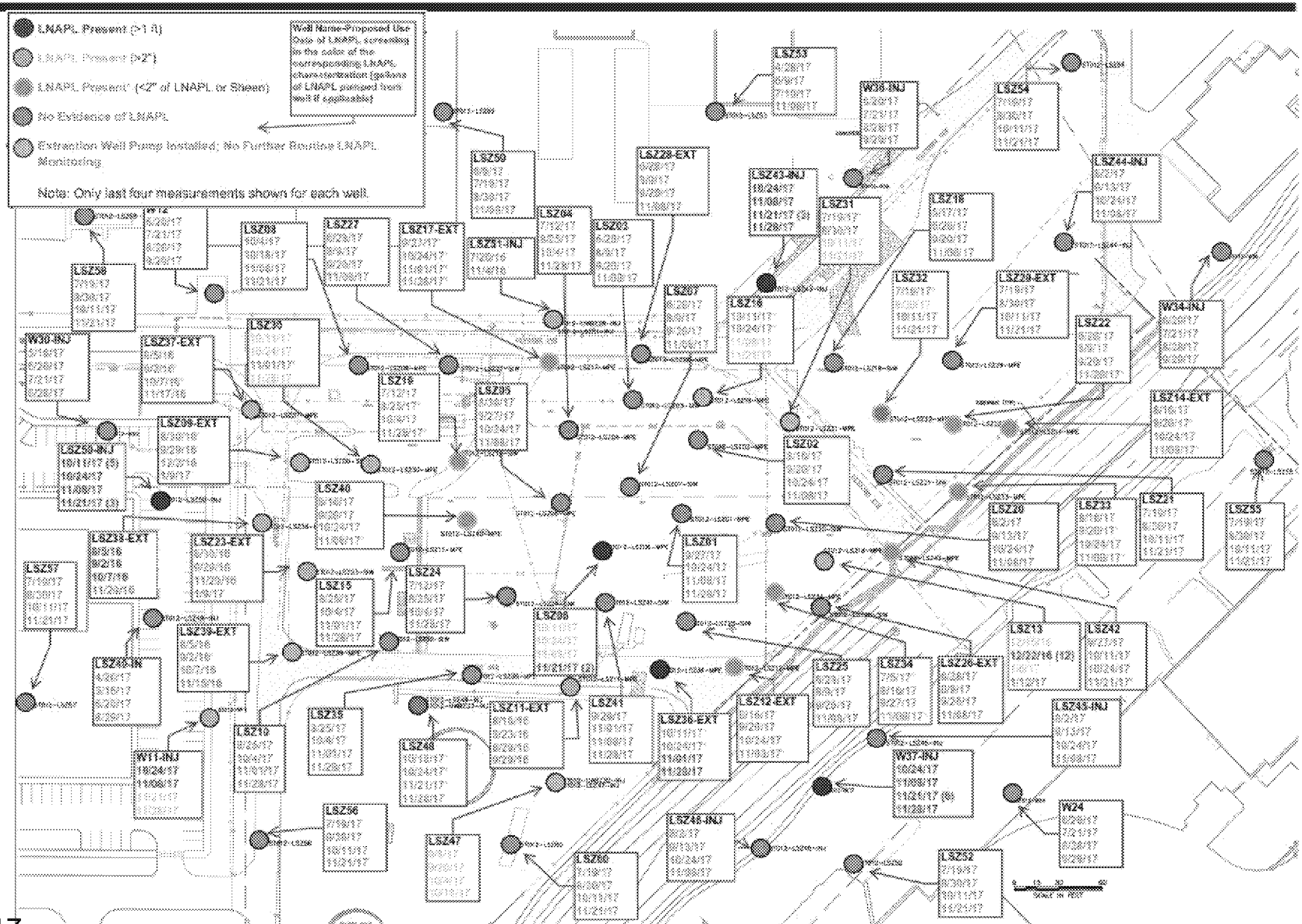
LNAPL Monitoring/Removal Status
Lower Saturated Zone



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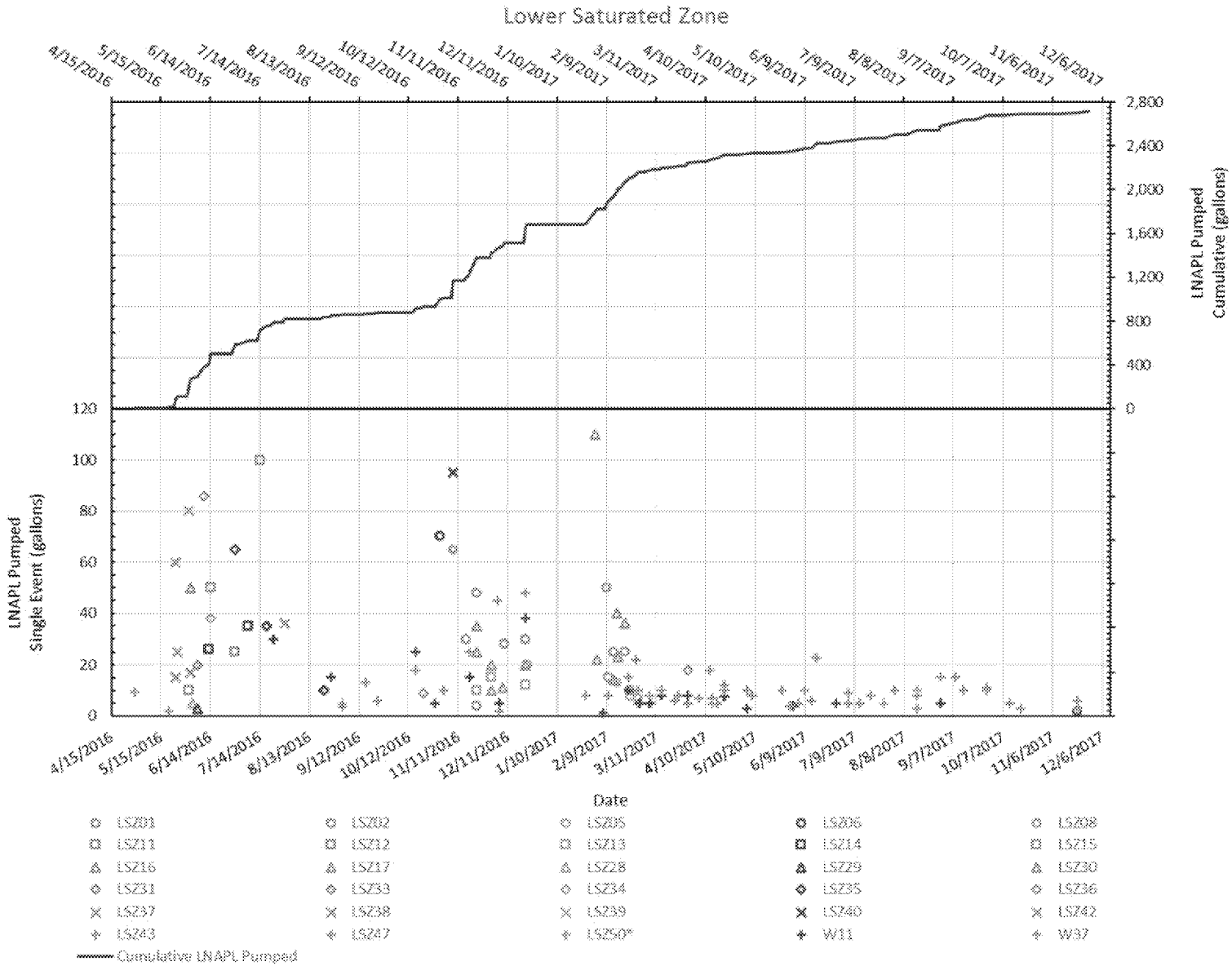
LNAPL Monitoring/Removal Status
Lower Saturated Zone



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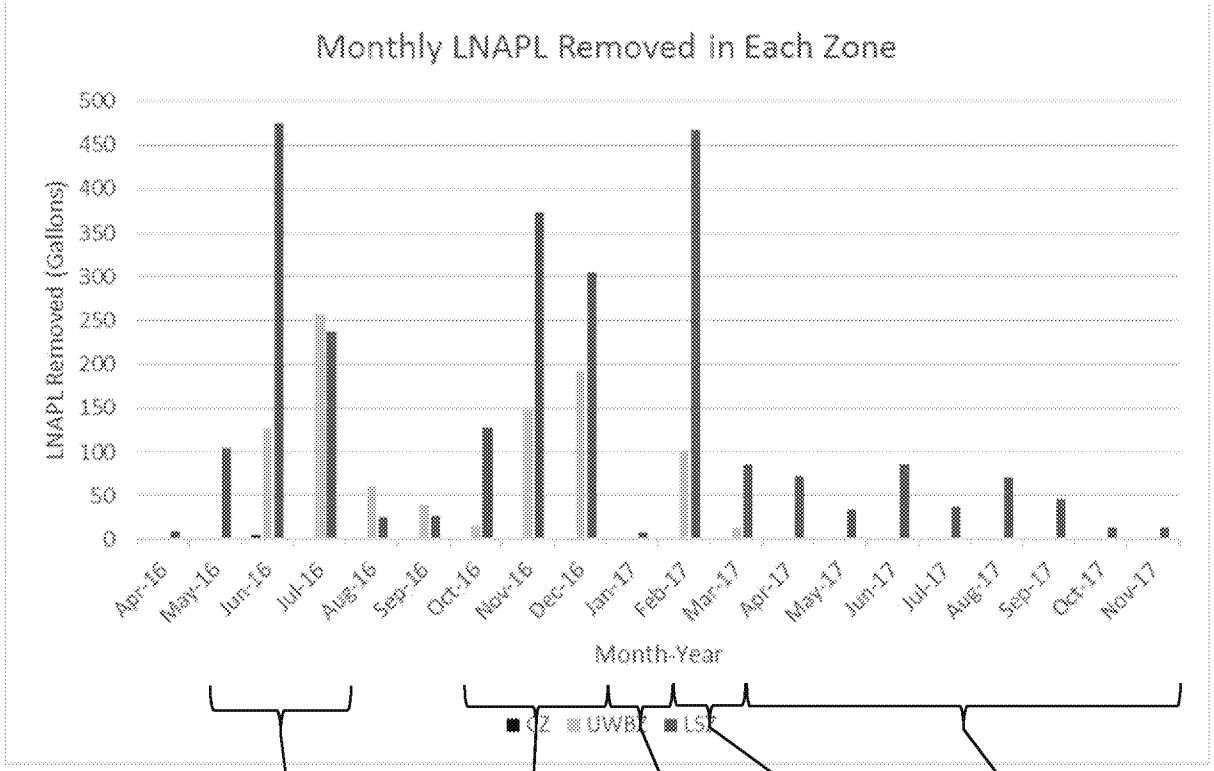
ST012 LNAPL Monitoring/Removal Summary

- CZ – 7 gallons of LNAPL removed. None since Nov 2016
- UWBZ - 964 gallons of LNAPL removed. None since Apr 2017.
- LSZ - 2,704 gallons of LNAPL removed. 14 gallons removed since Nov 2017 update (W37, LSZ06, LSZ43, LSZ50).



Removal following initial eductor removals

Removal following remaining eductor removals

Diminished removal due to pump failure

Recovery following pump replacement

<100 gal/mo from LSZ, outside of former TTZs

ED_005025_00012020-00013

Preliminary Annual/Perimeter Groundwater Concentrations (2017 through mid Nov, additional perimeter sample results pending)

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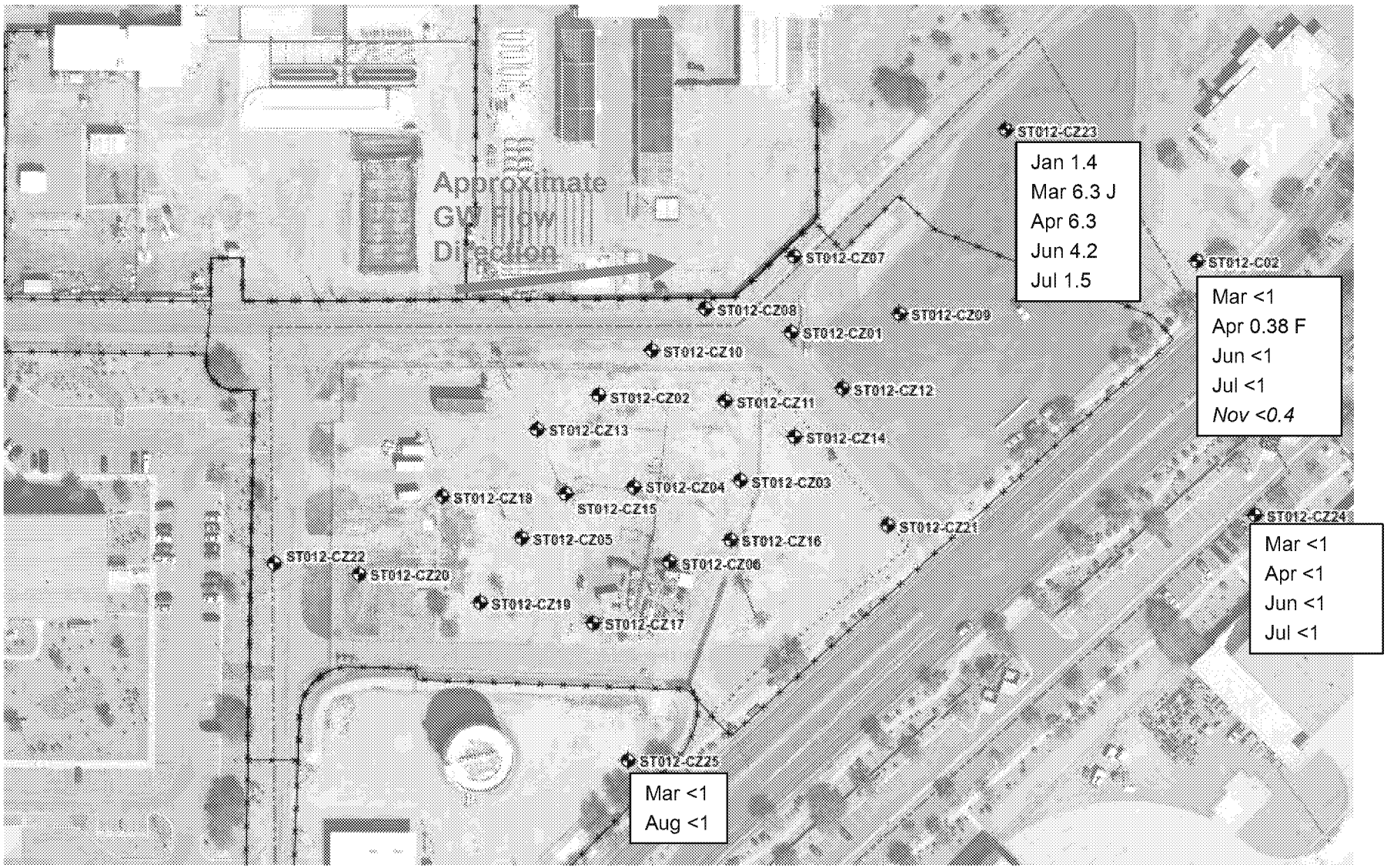
Site ST012 CZ Perimeter Benzene Groundwater Results (µg/L)



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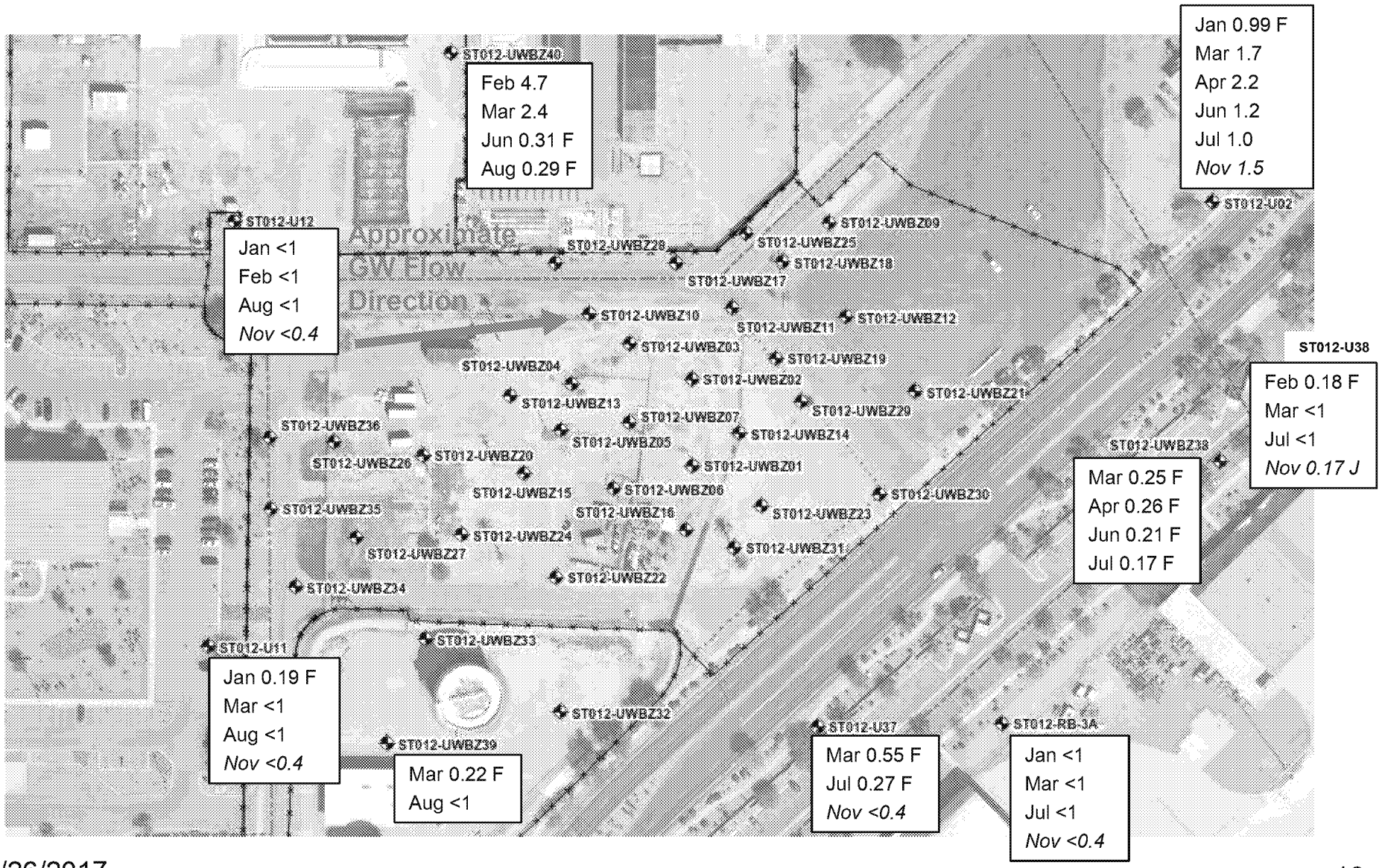
Site ST012 UWBZ Perimeter Benzene Groundwater Results (µg/L)



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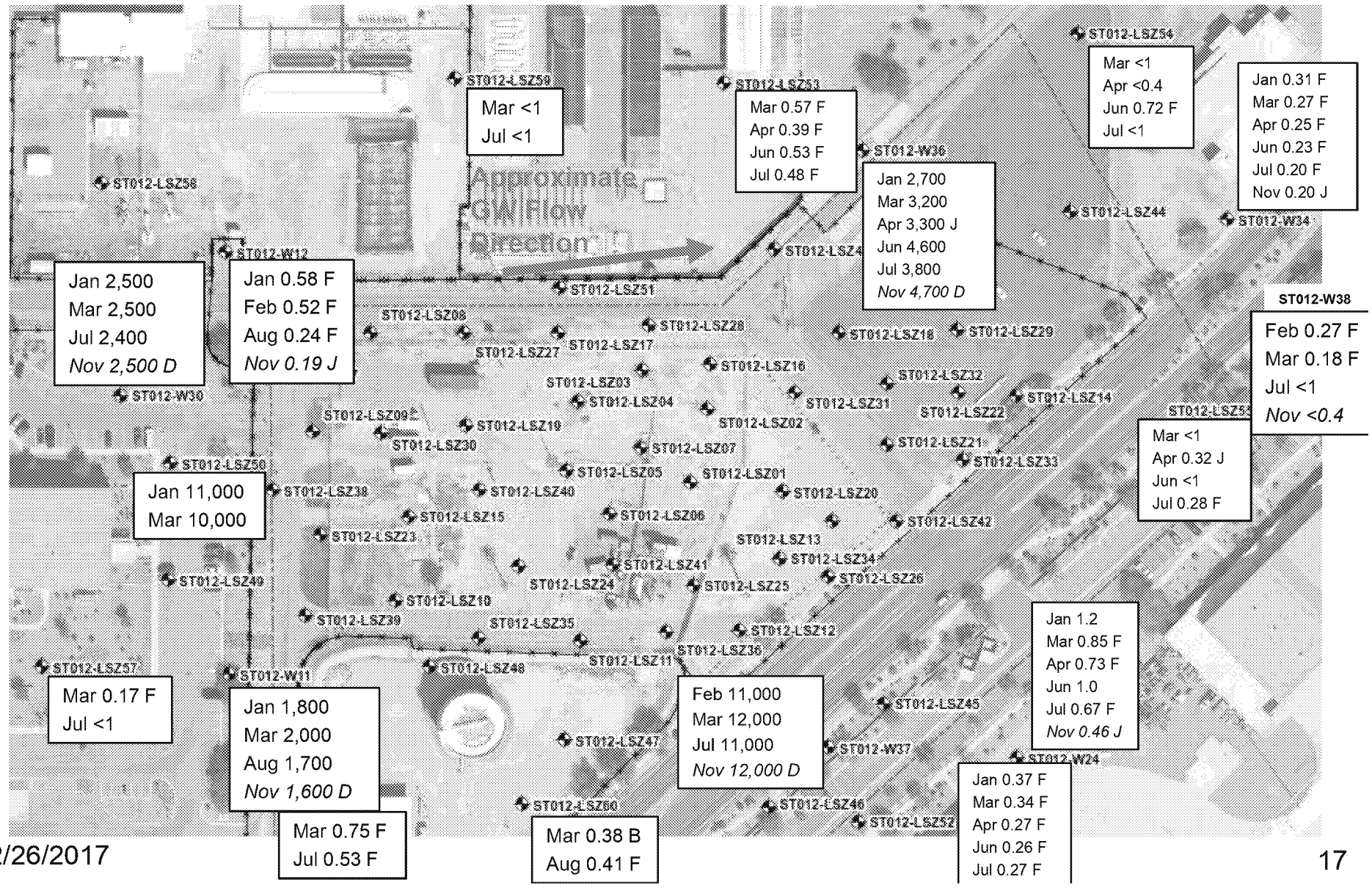
Site ST012 LSZ Perimeter Benzene Groundwater Results (µg/L)



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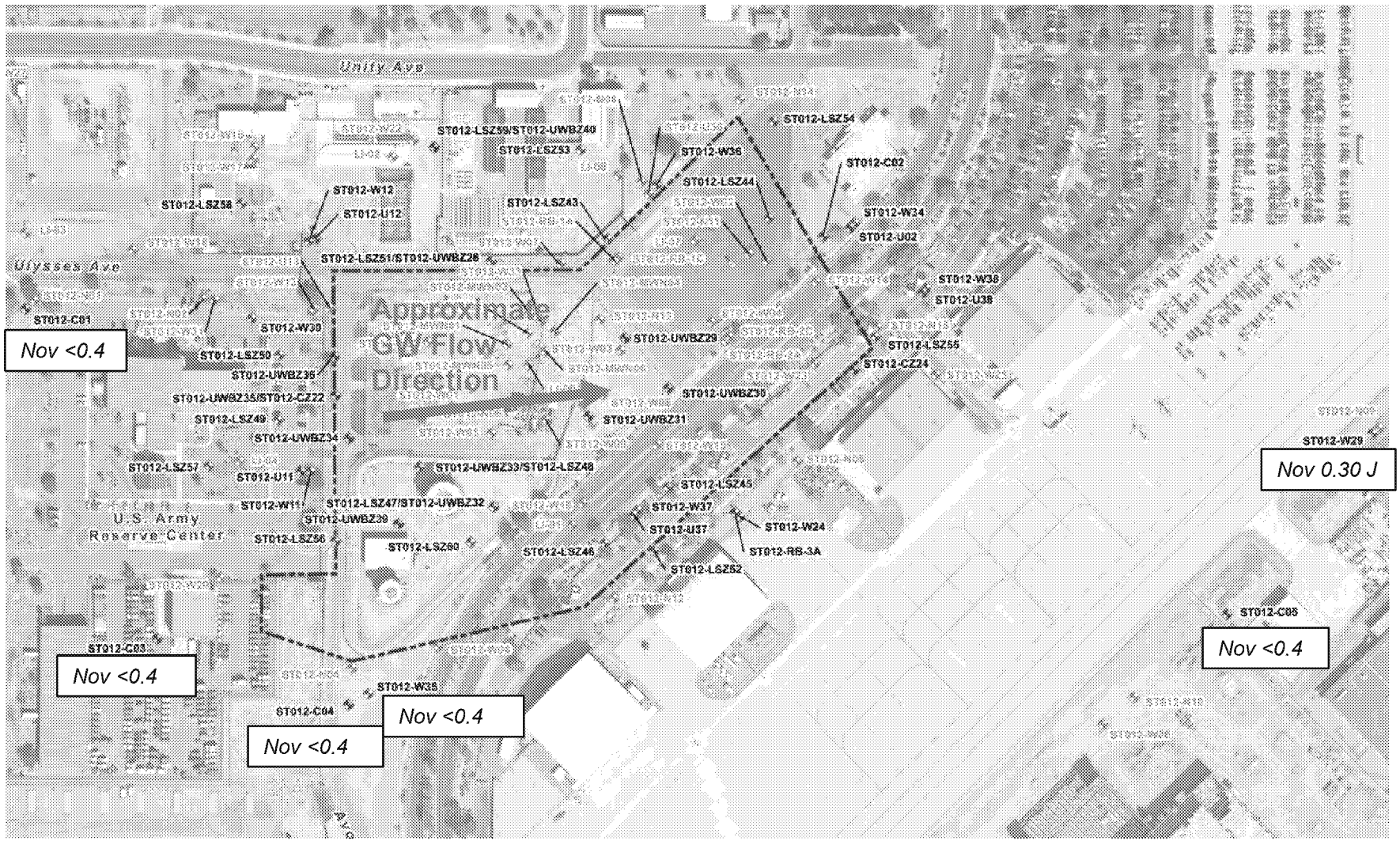
Site ST012 CZ-UWBZ-LSZ Distant Perimeter Benzene Groundwater Results (µg/L)



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Site ST012 Activities Dec-Jan

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

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