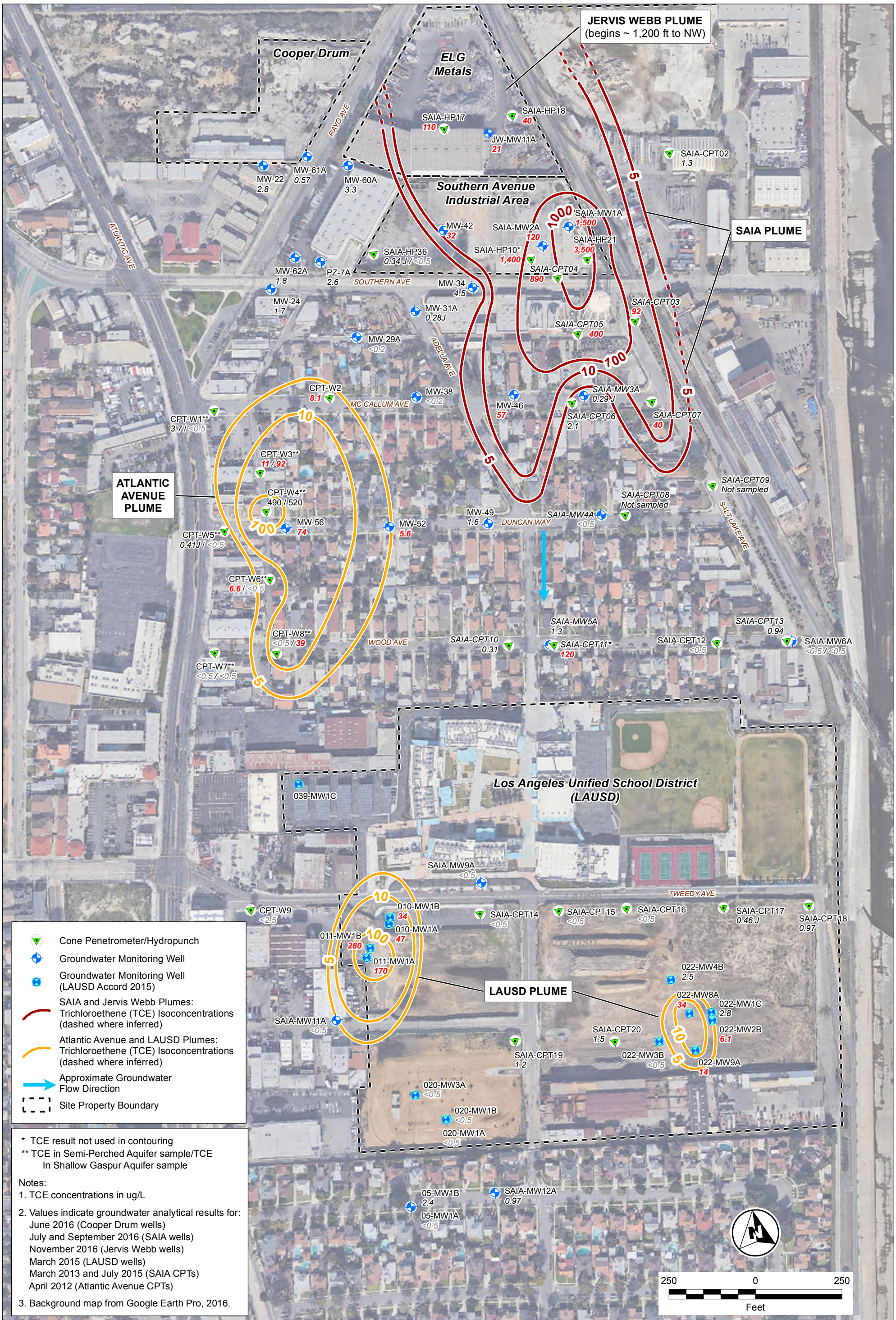


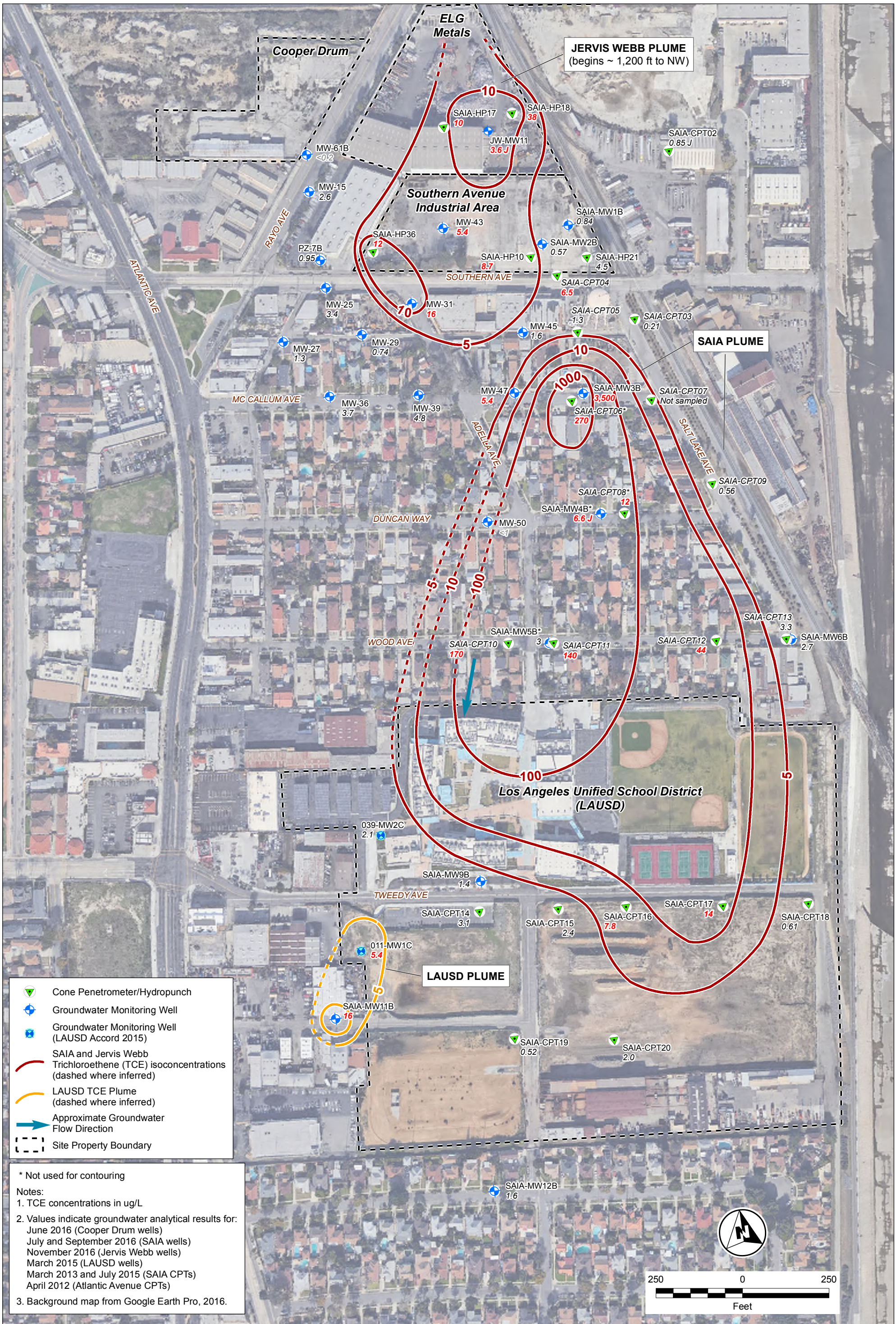
United States Environmental Protection Agency

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 4-5
Trichloroethene in Groundwater
Shallow Gaspur Aquifer
July/September 2016

G:\ArcGIS\EPA\SAIA\PROJECTS\RI_Report_2018\TCE_Isoconcentrations_Shallow_GA_2016.mxd 3/15/2019 eanderson, Gilbane



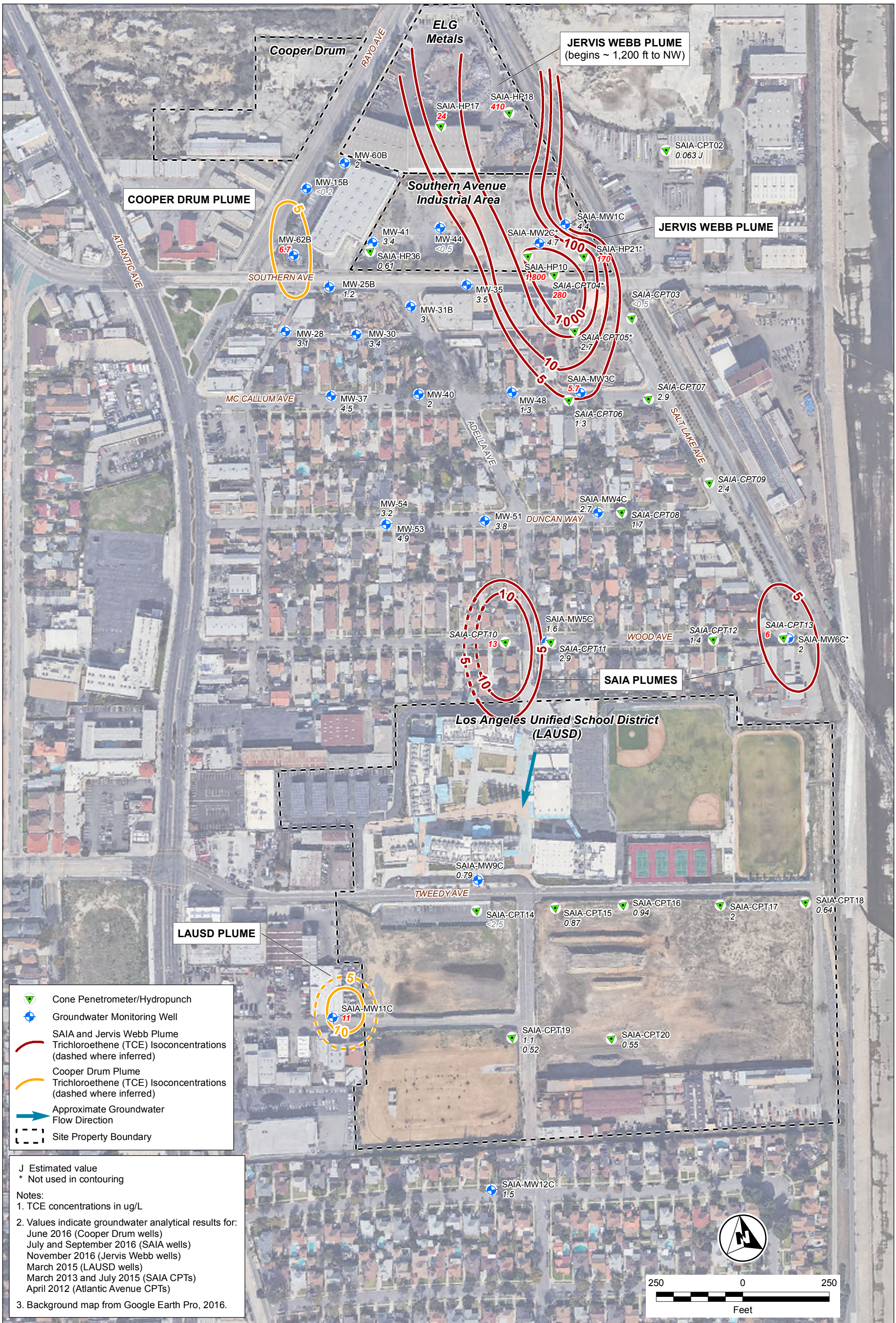
United States Environmental Protection Agency

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 4-6
Trichloroethene in Groundwater
Intermediate Gaspur Aquifer
July/September 2016

G:\ArcGIS\EPA\SAIA\PROJECTS\RI_Report_2018\TCE_Isoconcentrations_IMed_GA_2016.mxd 10/4/2018 kcholak, Gilbane



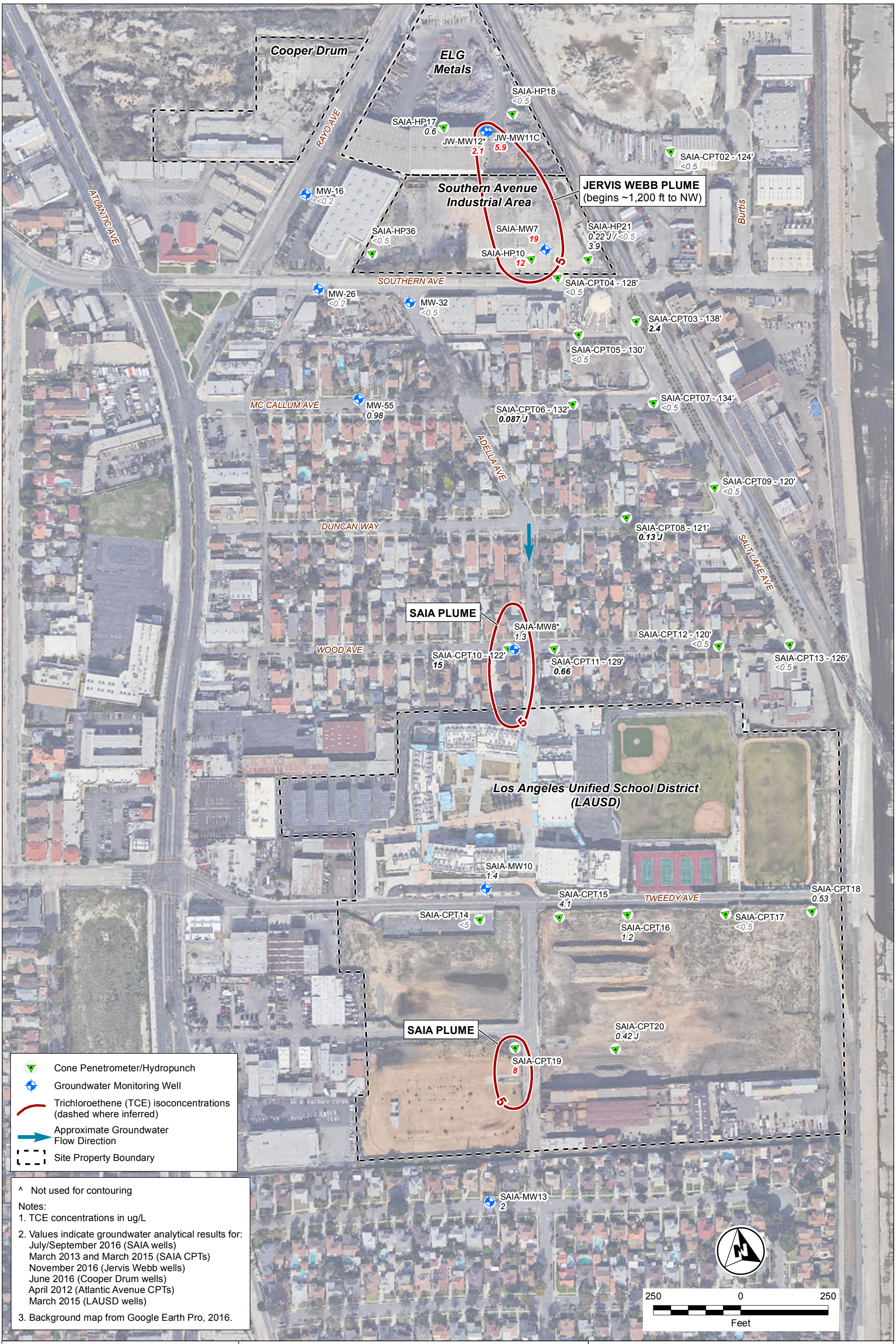
United States Environmental Protection Agency

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 4-7
Trichloroethene in Goundwater
Lower Gaspur Aquifer
July/September 2016

G:\ArcGIS\EPA\SAIA\PROJECTS\RI_Report_2018\TCE_Isoconcentrations_Lower_GA_2016.mxd 10/4/2018 kcholak, Gilbane



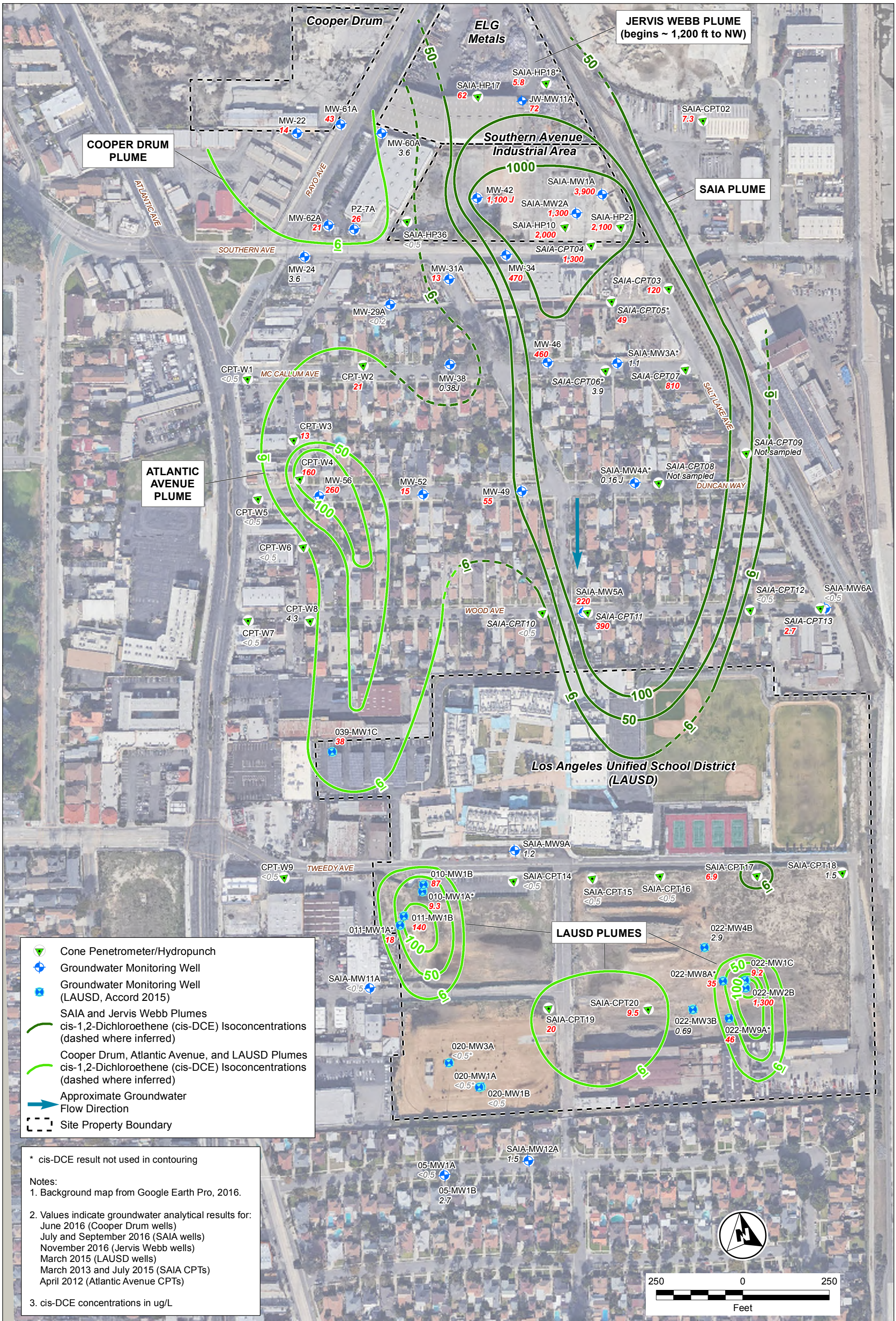
United States Environmental Protection Agency

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 4-8
Trichloroethene in Groundwater
Exposition Aquifer
July/September 2016

G:\ArcGIS\EPA\SAIA\PROJECTS\RI_Report_2018\TCE_Isoconcentrations_Exposition_GA_2016.mxd 10/4/2018 eanderson, Gilbane



* cis-DCE result not used in contouring

Notes:
1. Background map from Google Earth Pro, 2016.

2. Values indicate groundwater analytical results for:
June 2016 (Cooper Drum wells)
July and September 2016 (SAIA wells)
November 2016 (Jervis Webb wells)
March 2015 (LAUSD wells)
March 2013 and July 2015 (SAIA CPTs)
April 2012 (Atlantic Avenue CPTs)

3. cis-DCE concentrations in ug/L

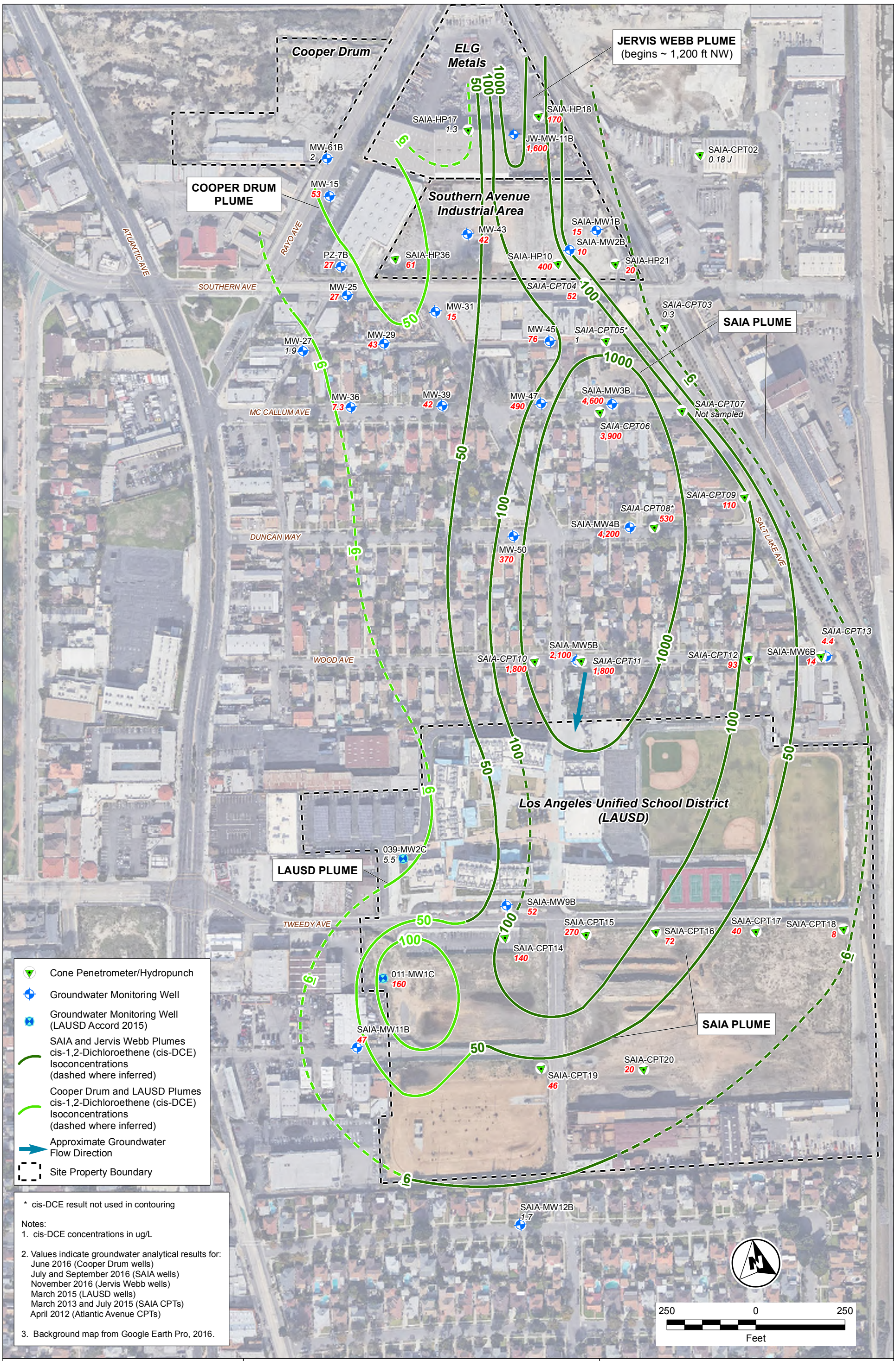
United States Environmental Protection Agency

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 4-9
cis-1,2-Dichloroethene in Groundwater
Shallow Gaspur Aquifer
July/September 2016

G:\ArcGIS\EPA\SAIA\PROJECTS\RI_Report_2018\cis12DCE_Isoconcentrations_Shallow_GA_Jul_Sep_2016.mxd 3/15/2019 eanderson, Gilbane



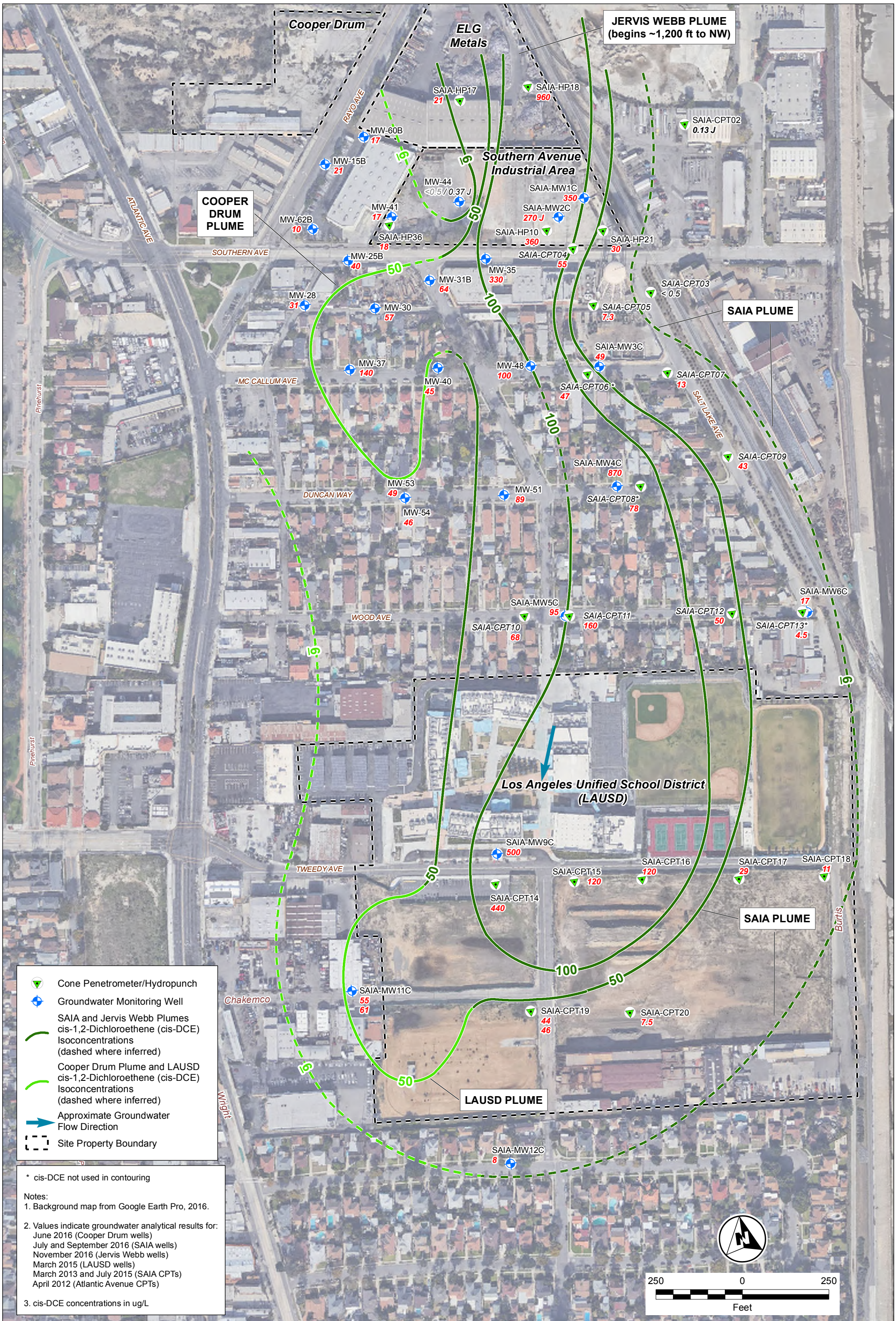
United States Environmental Protection Agency

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 4-10
cis-1,2-Dichloroethene in Groundwater
Intermediate Gaspur Aquifer
July/September 2016

G:\ArcGIS\EPA\SAIA\PROJECTS\RI_Report_2018\cis12DCE_Isoconcentrations_IMed_GA_Jul_Sep_2016.mxd 3/21/2019 eanderson, Gilbane



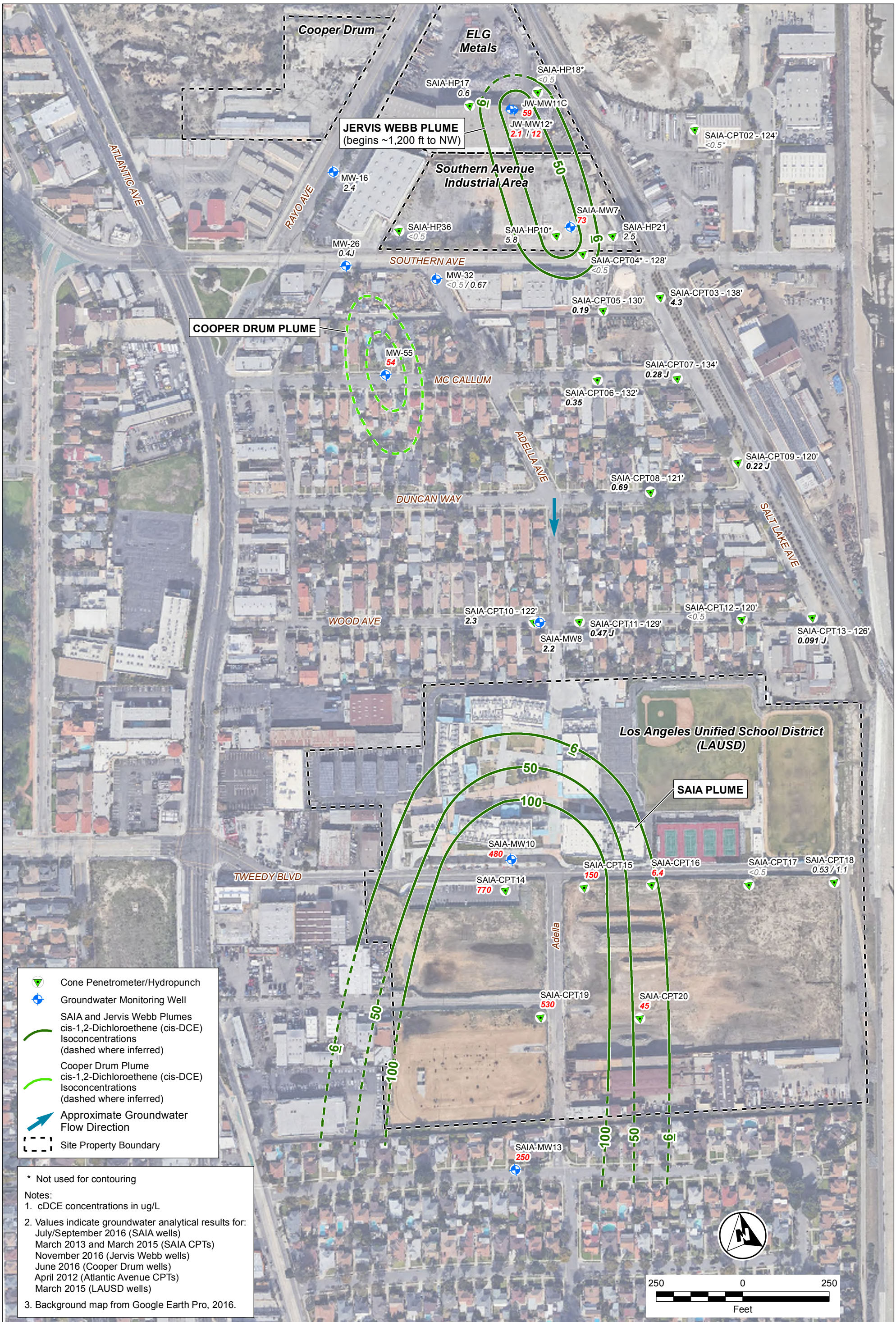
United States Environmental Protection Agency

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 4-11
cis-1,2-Dichloroethene in Groundwater
Lower Gaspur Aquifer
July/September 2016

G:\ArcGIS\EPA\SAIA\PROJECTS\RI_Report_2018\cis12DCE_Isoconcentrations_Lower_GA_Jul_Sep_2016.mxd 3/15/2019 eanderson, Gilbane



EPA United States Environmental Protection Agency

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 4-12
cis-1,2-Dichloroethene in Groundwater
Exposition Aquifer
July/September 2016

G:\ArcGIS\EPA\SAIA\PROJECTS\RI_Report_2018\cis12DCE_Isoconcentrations_Exposition_GA.mxd 3/18/2019 eanderson, Gilbane

* Result not used for contouring

Notes:
1. 1,4-Dioxane concentrations in ug/L
2. Values indicate groundwater analytical results for:
   June 2016 (Cooper Drum wells)
   July and September 2016 (SAIA wells)
   November 2016 (Jervis Webb wells)
   March 2015 (LAUSD wells)
   March 2013 and July 2015 (SAIA CPTs)
   April 2012 (Atlantic Avenue CPTs)
3. Background map from Google Earth Pro, 2016.

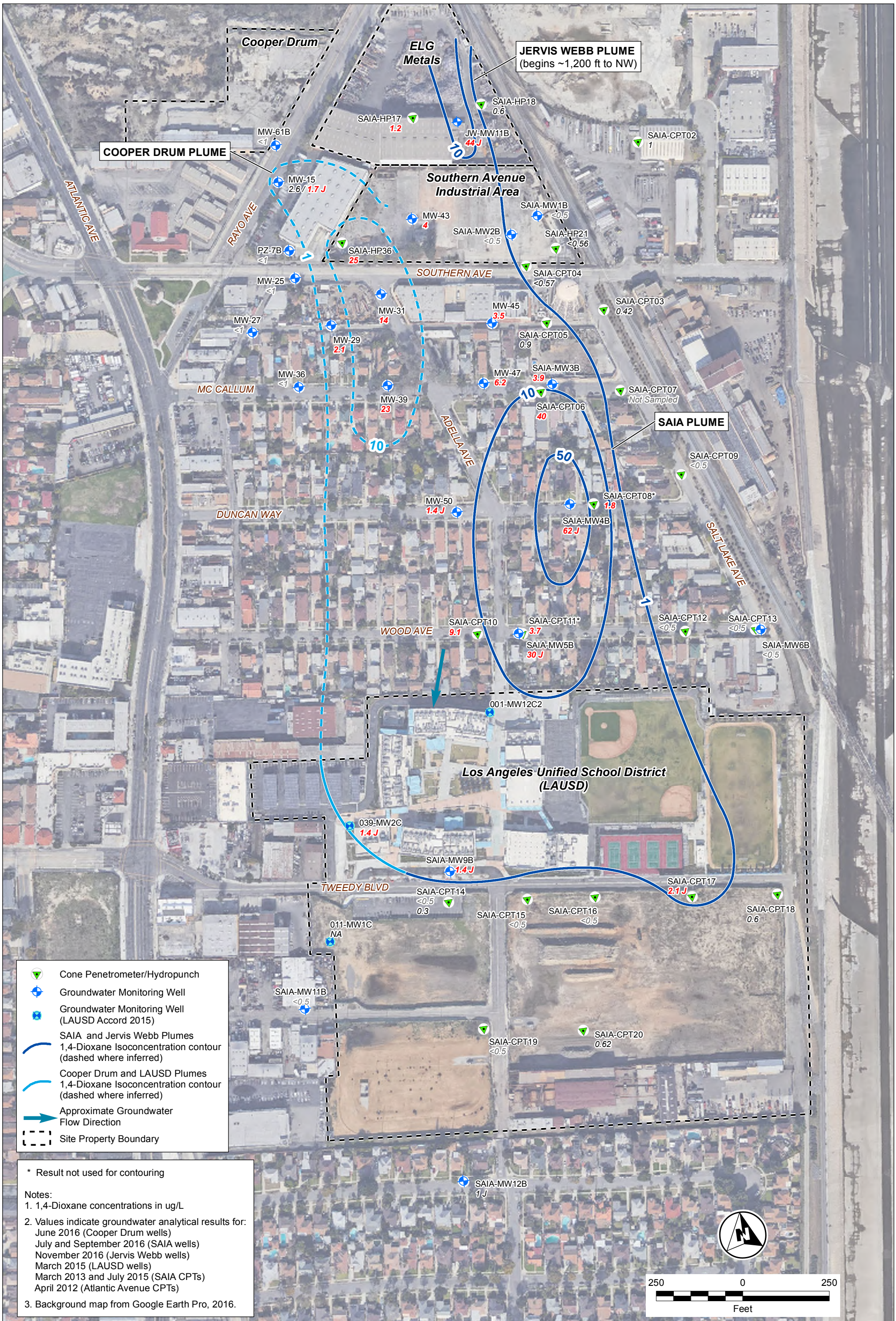
United States Environmental Protection Agency

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 4-13
1,4-Dioxane in Groundwater
Shallow Gaspur Aquifer
July/September 2016

G:\ArcGIS\EPA\SAIA\PROJECTS\RI_Report_2018\14Dioxane_Isoconcentrations_Shallow_GA_Jul_Sep_2016.mxd 3/18/2019 eanderson, Gilbane



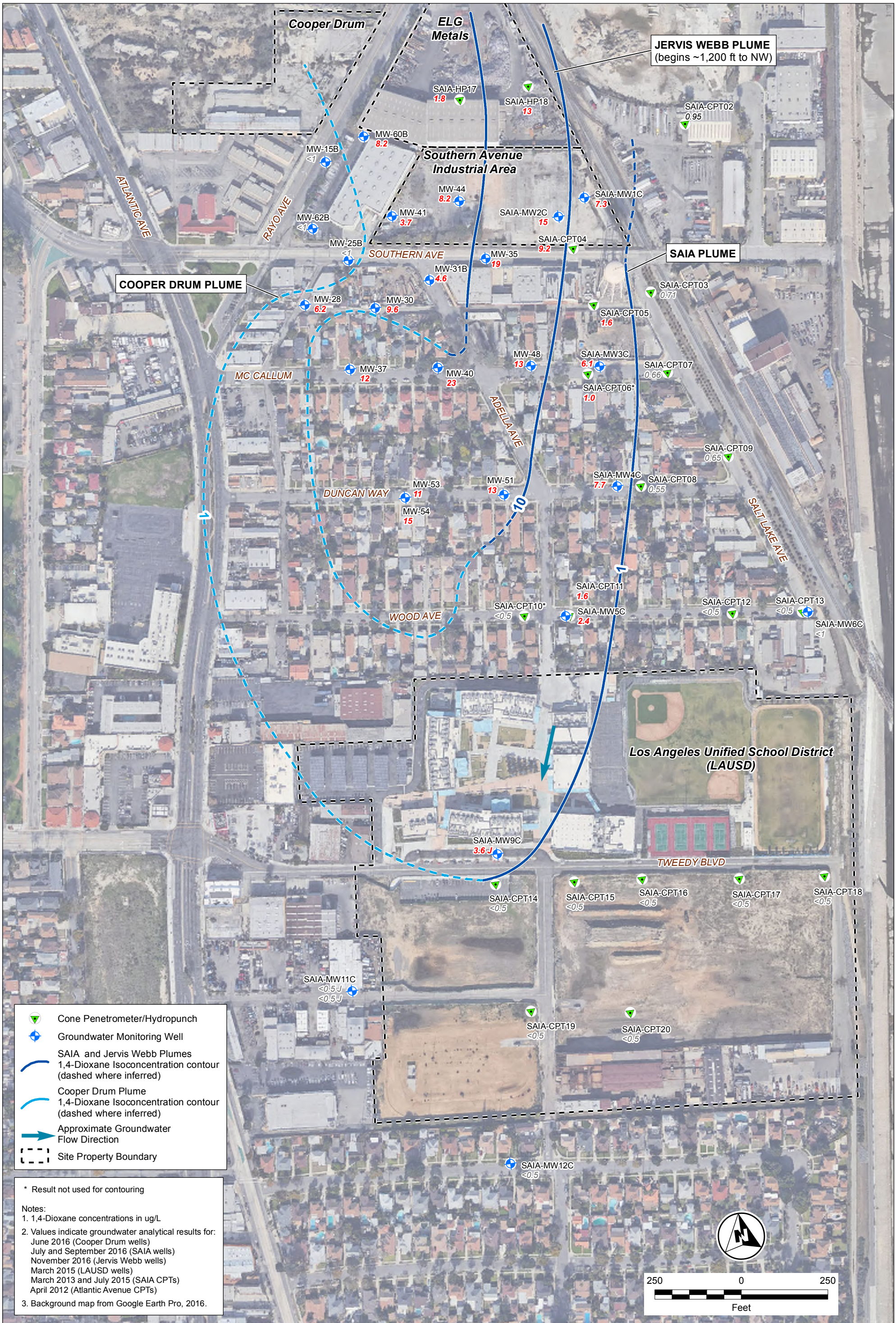
United States Environmental Protection Agency

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 4-14
1,4-Dioxane in Groundwater
Intermediate Gaspur Aquifer
July/September 2016

G:\ArcGIS\EPA\SAIA\PROJECTS\RI_Report_2018\14Dioxane_Isoconcentrations_IMed_GA_Jul_Sep_2016.mxd 3/18/2019 eanderson, Gilbane



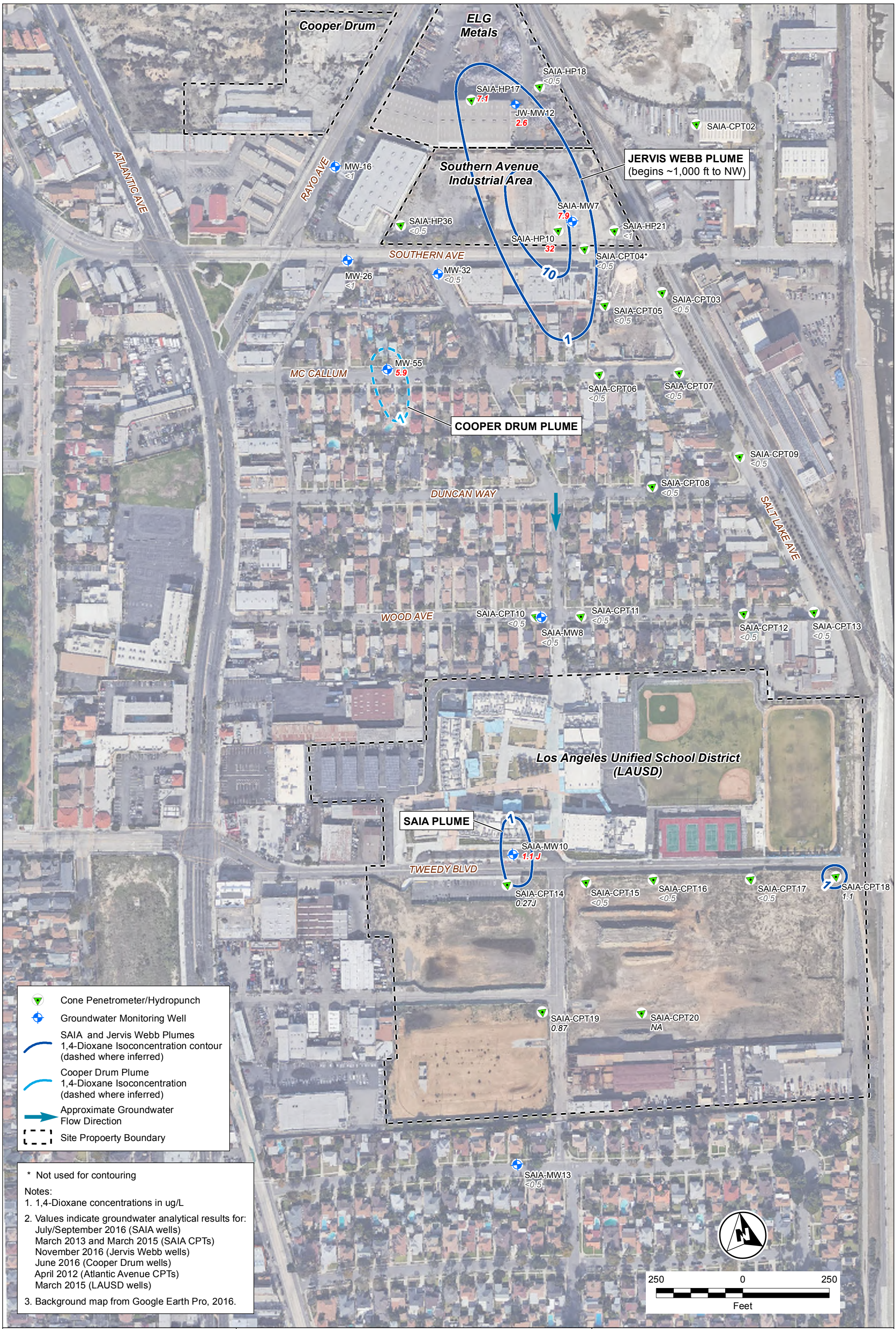
United States Environmental Protection Agency

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 4-15
1,4-Dioxane in Groundwater
Lower Gaspur Aquifer
July/September 2016

G:\ArcGIS\EPA\SAIA\PROJECTS\RI_Report_2018\14Dioxane_Isoconcentrations_Lower_GA_Jul_Sep_2016.mxd 3/15/2019 eanderson, Gilbane



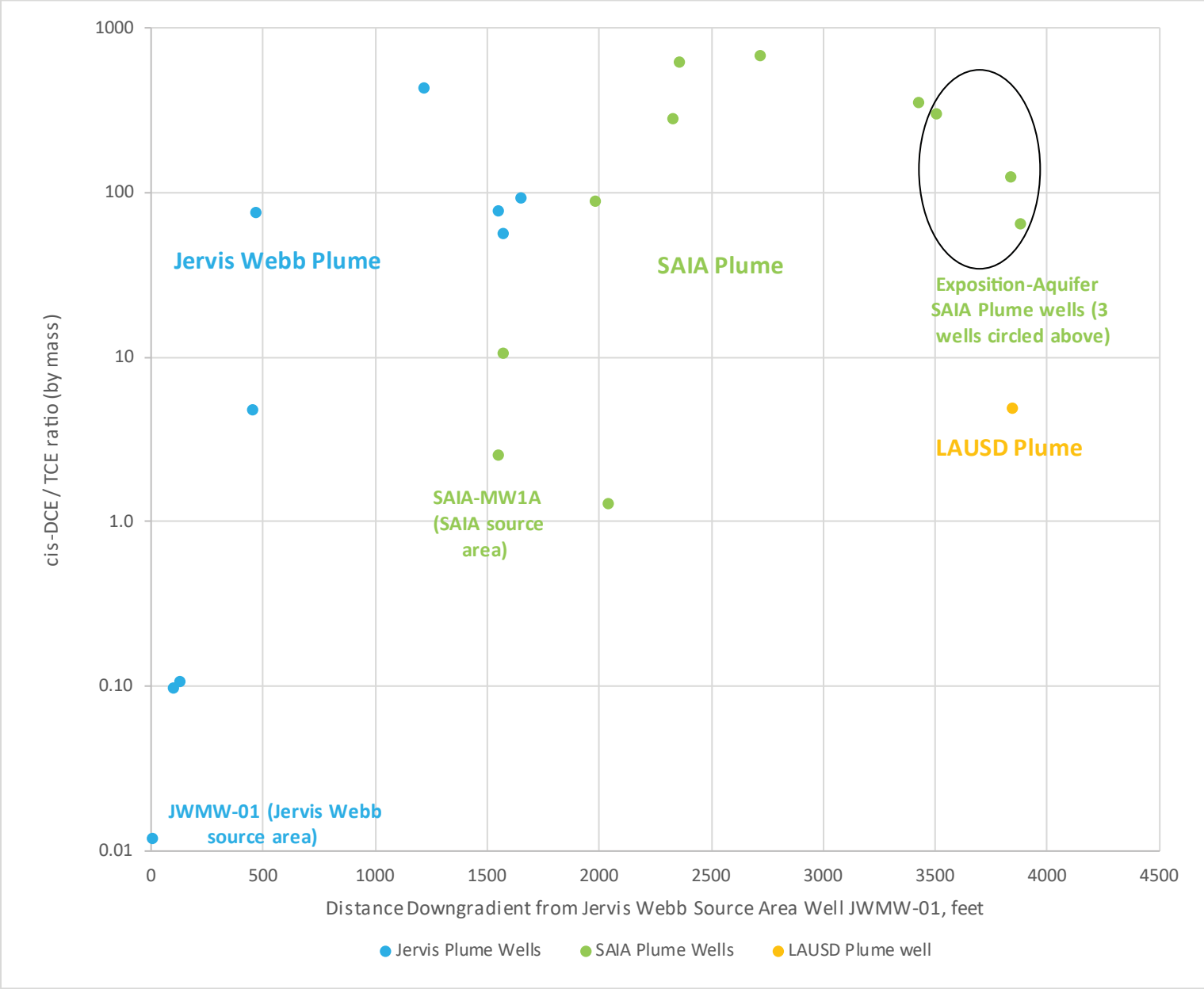
United States Environmental Protection Agency

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 4-16
1,4-Dioxane in Groundwater
Exposition Aquifer
July/September 2016

G:\ArcGIS\EPA\SAIA\PROJECTS\RI_Report_2018\14Dioxane_Isoconcentrations_Exposition_GA_Jul_Sep_2016.mxd 3/21/2019 eanderson, Gilbane



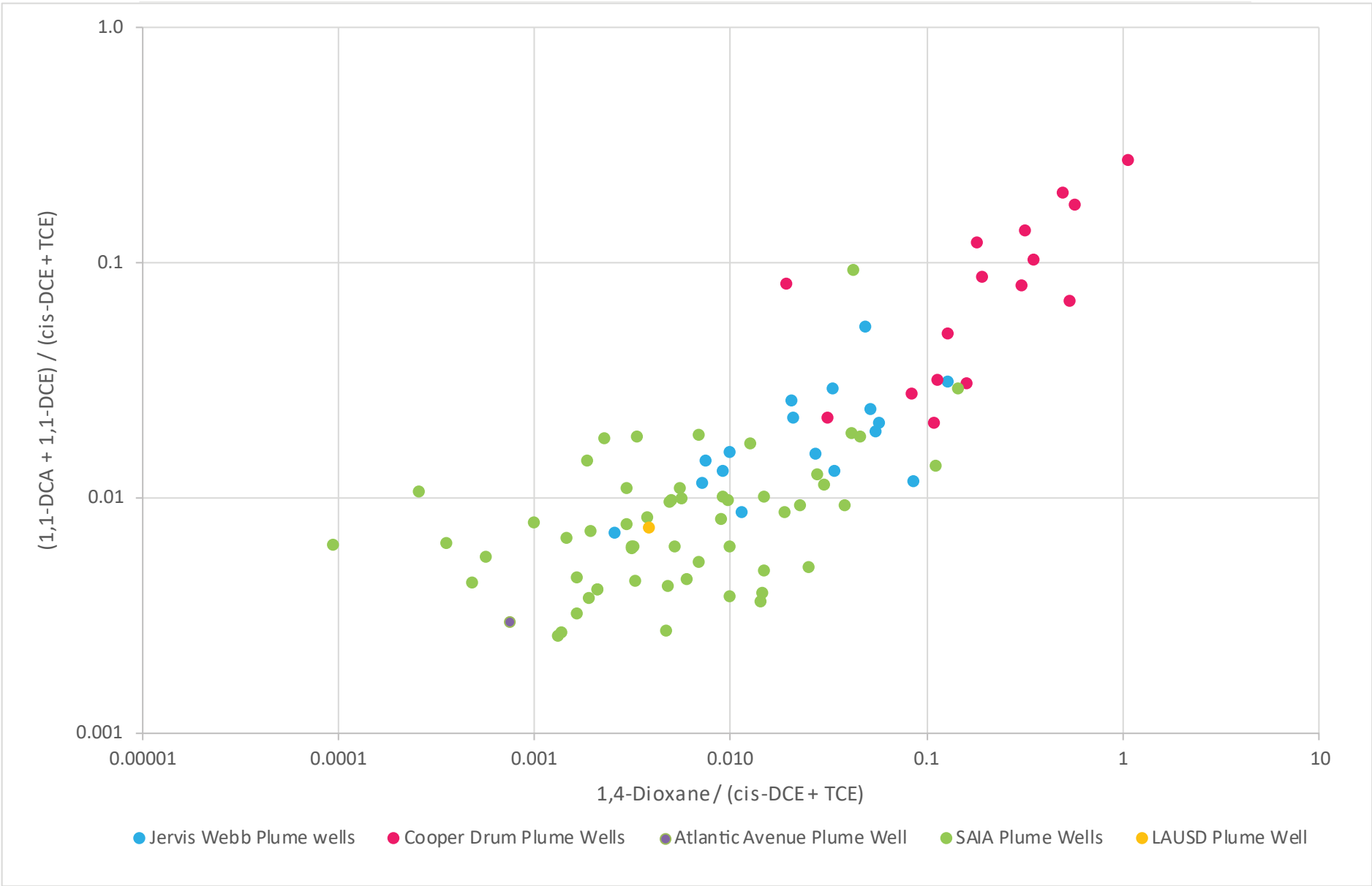
P:\EPAR9\0064 TO 063-RICO-09WS, So. Ave Indstl Area\13.0 Graphics\VOC Plume Ratios 2018 SAIA.ai 03/22/2019

EPA United States Environmental Protection Agency

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 4-17
cis-DCE to TCE Ratios
in SAIA and Jervis Webb
Groundwater VOC Plumes



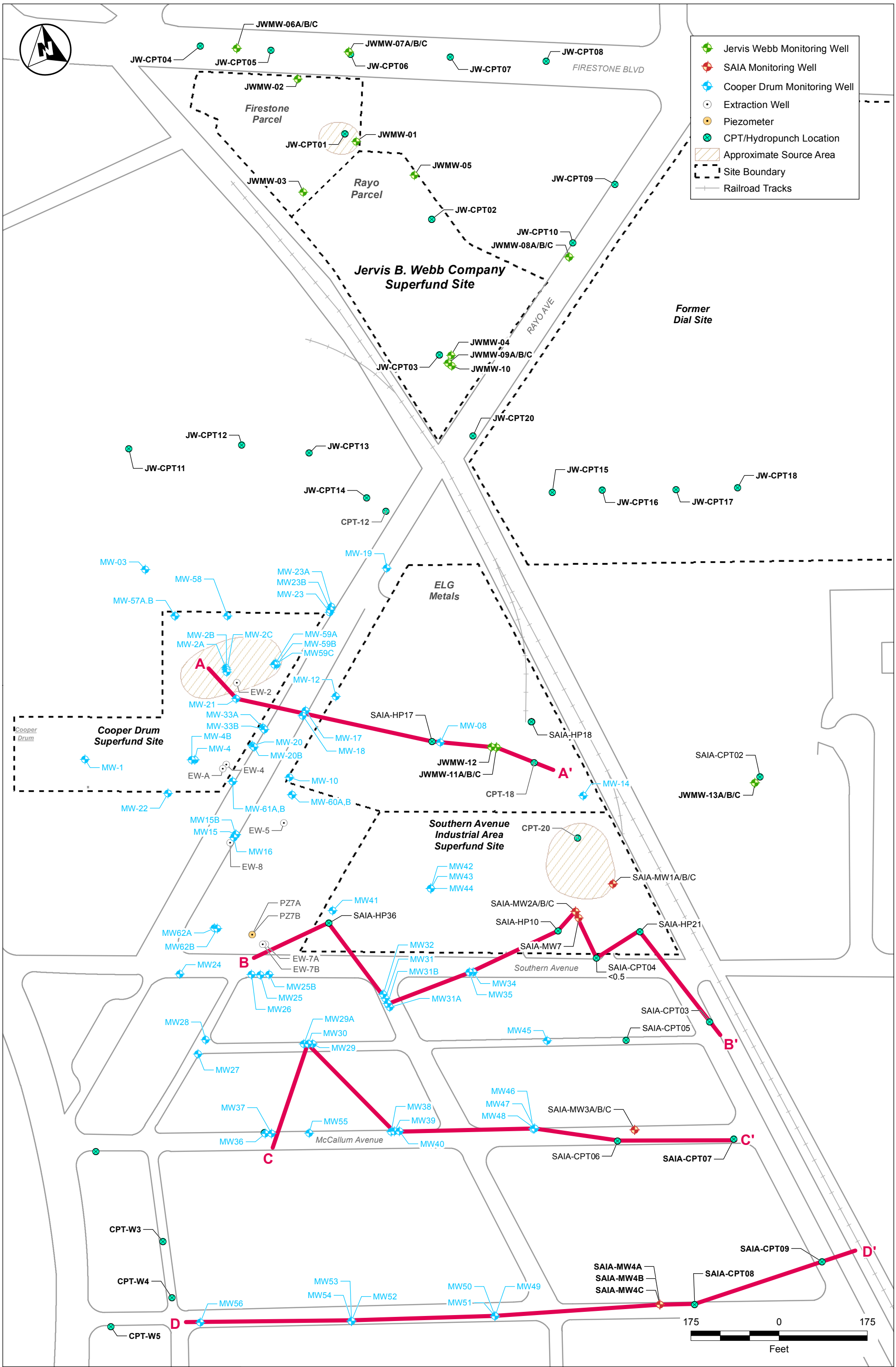
United States Environmental Protection Agency

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 4-18
Contaminant Ratios in Groundwater VOC Plumes in and near SAIA

P:\EPAR9\0064 TO 063-RICO-09WS, So. Ave Indstl Area\13.0 Graphics\Contaminant Ratios in GW VOC near SAIA.ai 03/22/2019



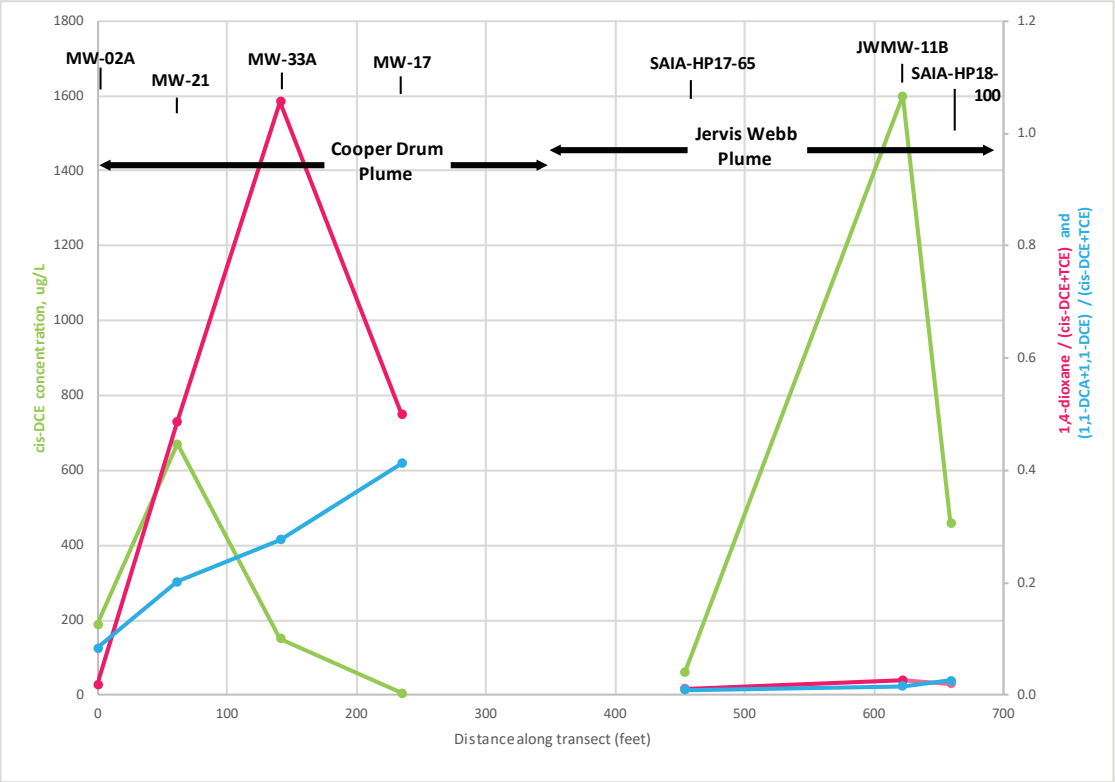
United States Environmental Protection Agency

Gilbane

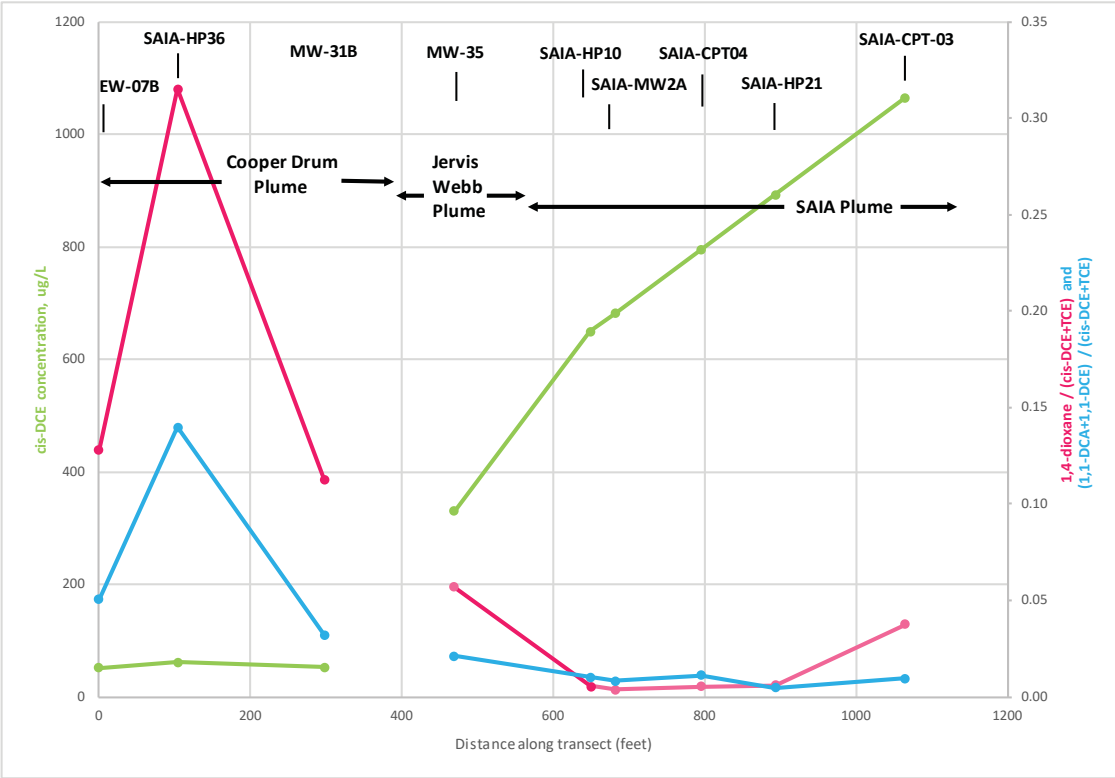
Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
US Environmental Protection Agency

Figure 4-19
Transects for Commingling Plots

G:\ArcGIS\EPA\SAIA\PROJECTS\RI_Report_2018\CommingledPlumes_Xsection_Lines_SAIA.mxd 3/25/2019 eanderson, Gilbane



Transect A-A', proceeding West to East



Transect B-B', proceeding West to East

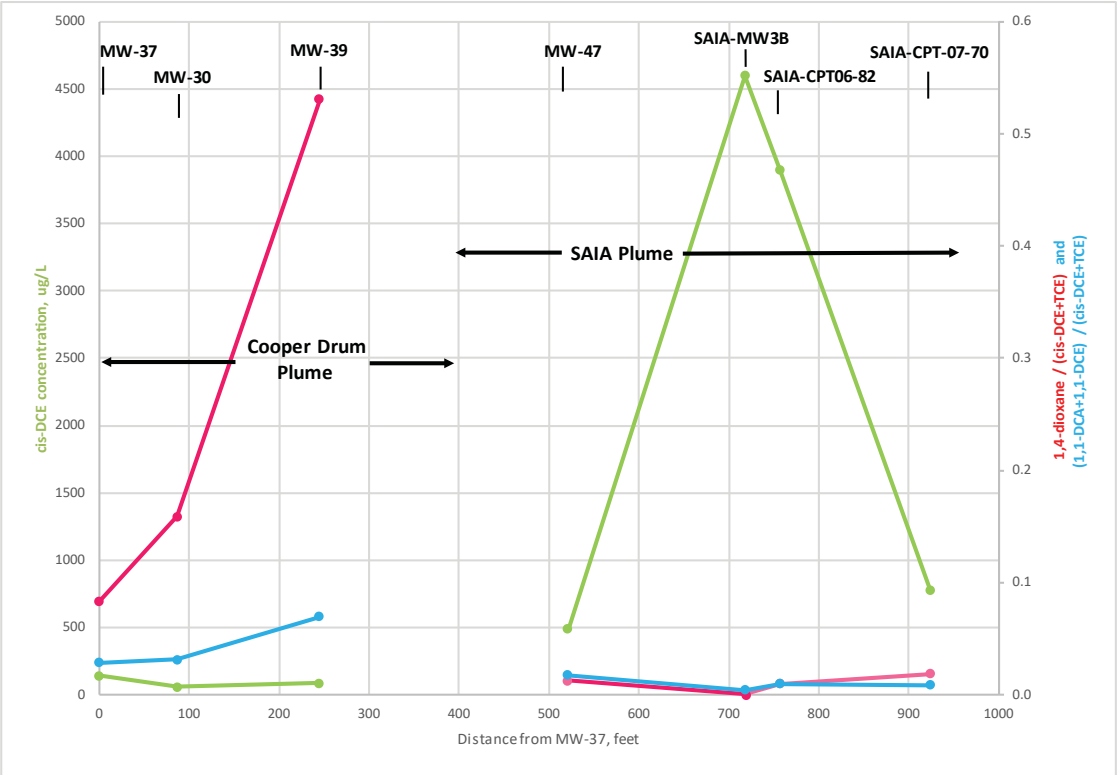
P:\EPAR9\0064 TO 063-RICO-09WS, So. Ave Indstl Area\13.0 Graphics\cis_DCE EW A-A_B-B_SAIA 2018.ai 03/22/2019

United States Environmental Protection Agency

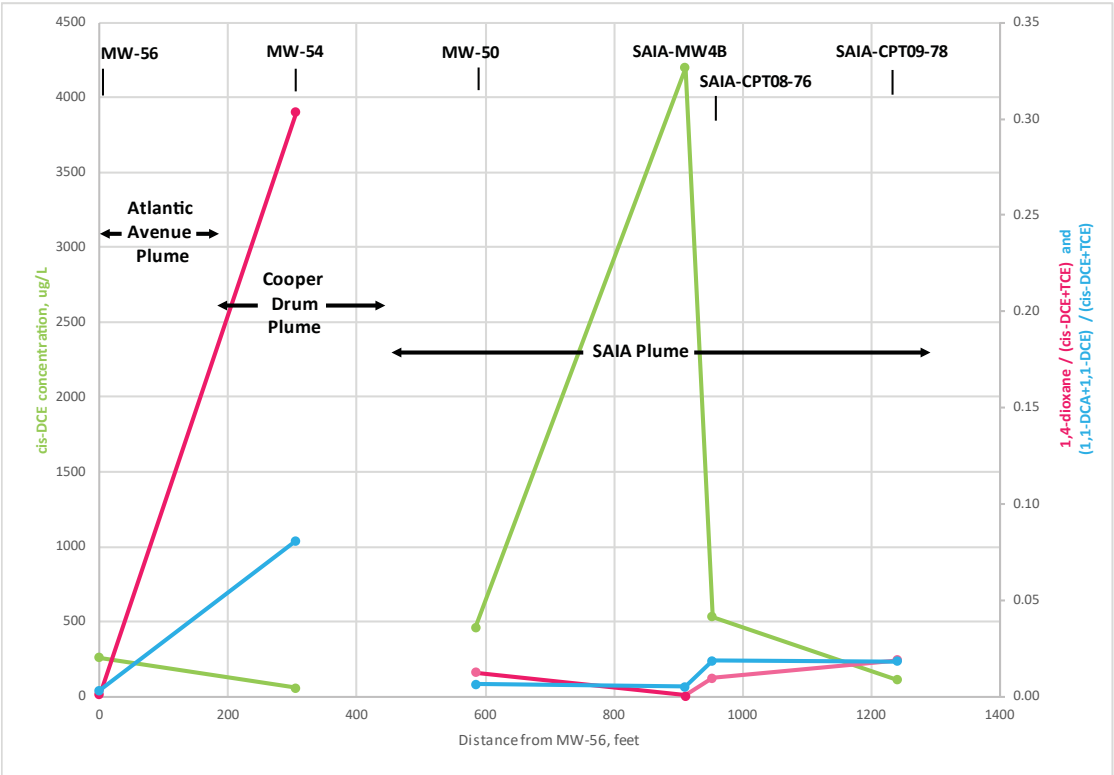
Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 4-20
cis-DCE Concentrations and Contaminant Ratios in East-West Transects of Cooper Drum and Jervis Webb/SAIA VOC Contaminant Plumes



Transect C-C', proceeding West to East



Transect D-D', proceeding West to East

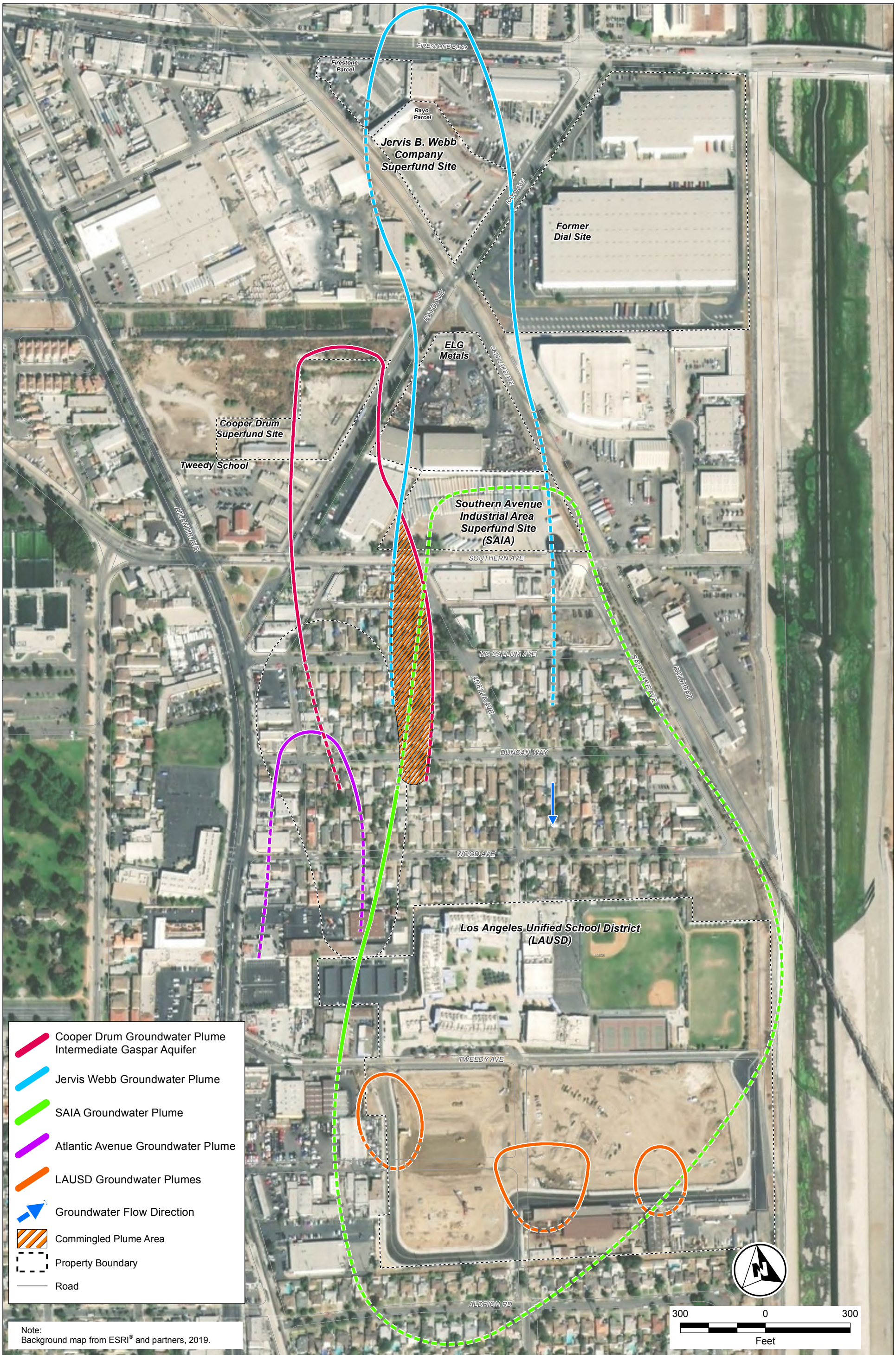
P:\EPAR9\0064 TO 063-RICO-09WS, So. Ave Indstl Area\13.0 Graphics\cis_DCE EW C-C_D-D_SAIA 2018.ai 03/22/2019

EPA United States Environmental Protection Agency

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 4-21
cis-DCE Concentrations and Contaminant Ratios in East-West Transects of Cooper Drum, Atlantic Avenue, and SAIA Groundwater VOC Contaminant Plumes



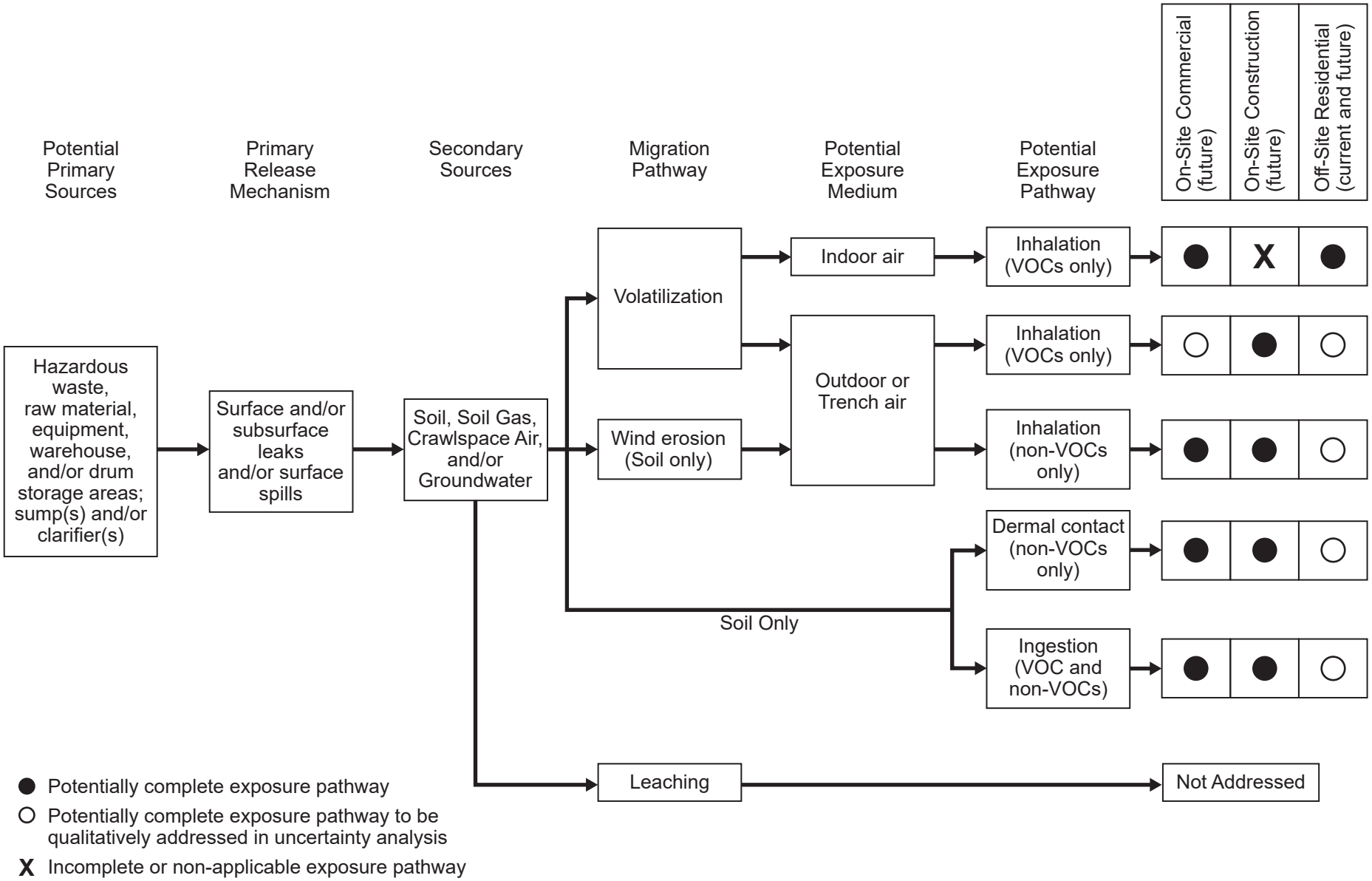
United States Environmental Protection Agency

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
US Environmental Protection Agency

Figure 4-22
Estimated VOC Plume Outlines and Commingling Areas

G:\ArcGIS\EPA\SAIA\PROJECTS\RI_Report_2018\VOCs_Comingled_Plumes_SAIA.mxd 3/21/2019 eanderson, Gilbane



P:\EPAR9\0064 TO 063-RICO-09WS,So.Ave Indstl Area\13.0 Graphics\Conceptual_Site_Model.ai 03/25/2019

Gilbane

Southern Avenue Industrial Area Superfund Site
Remedial Investigation Report
South Gate, California
U.S. Environmental Protection Agency

Figure 6-1
Conceptual Site Exposure Model