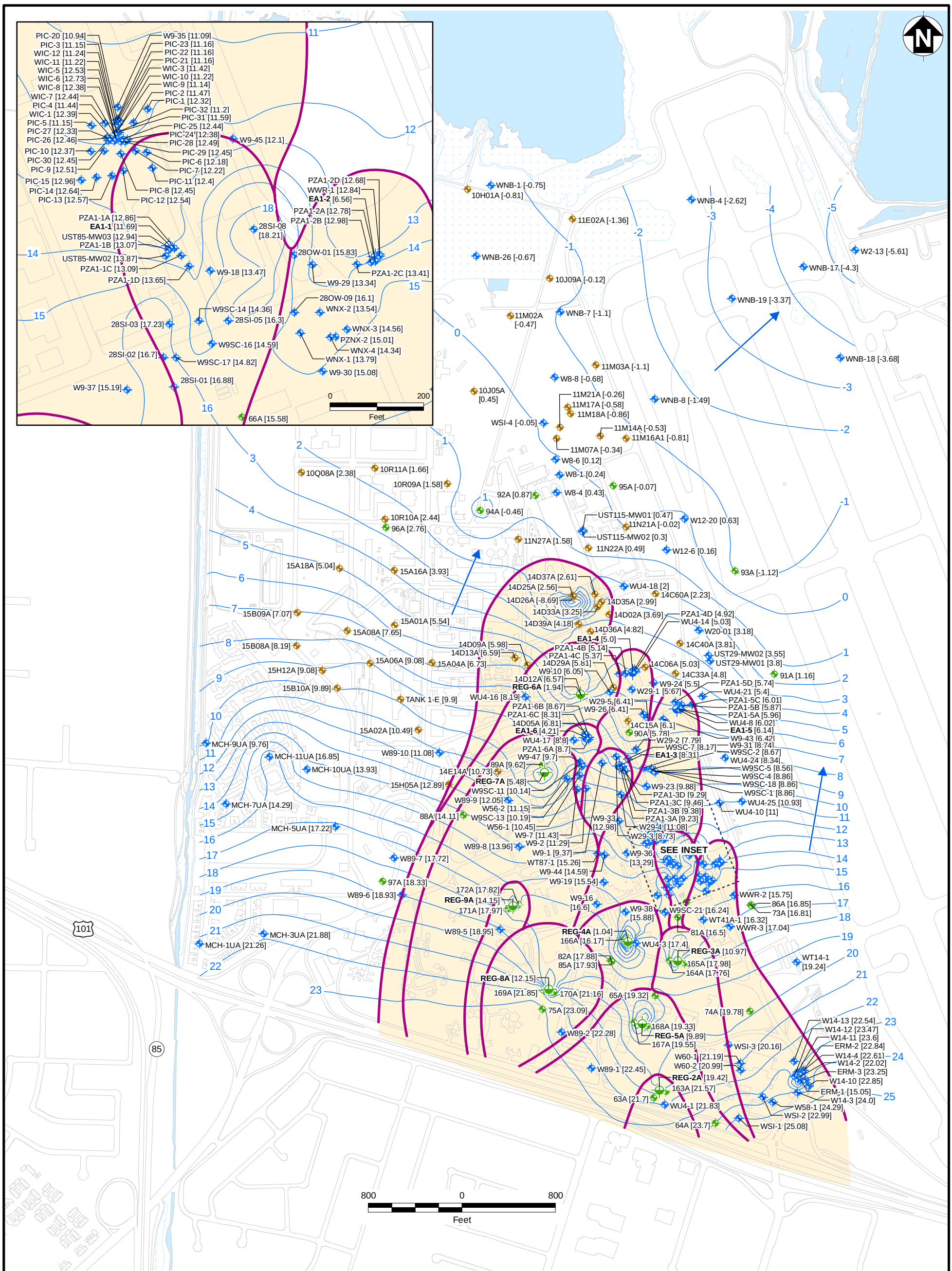


NAVY EXTRACTION WELL
NAVY MONITORING WELL
MEW EXTRACTION WELL
MEW MONITORING WELL
NASA MONITORING WELL
[5.5] GROUNDWATER ELEVATION
ESTIMATED EXTENT OF HYDRAULIC CAPTURE
20 GROUNDWATER CONTOUR
GROUNDWATER FLOW DIRECTION
ROAD
FACILITY INFRASTRUCTURE
WATER
WETLAND

Notes:

1. Groundwater levels measured on March 19, 2015
2. Groundwater elevations shown in feet amsl

AMSL - Above Mean Sea Level
IR - Installation Restoration
MEW - Middlefield-Ellis-Whisman
NAS - Naval Air Station
NASA - National Aeronautics and Space Administration
NM - Not Measured

SES-TECH

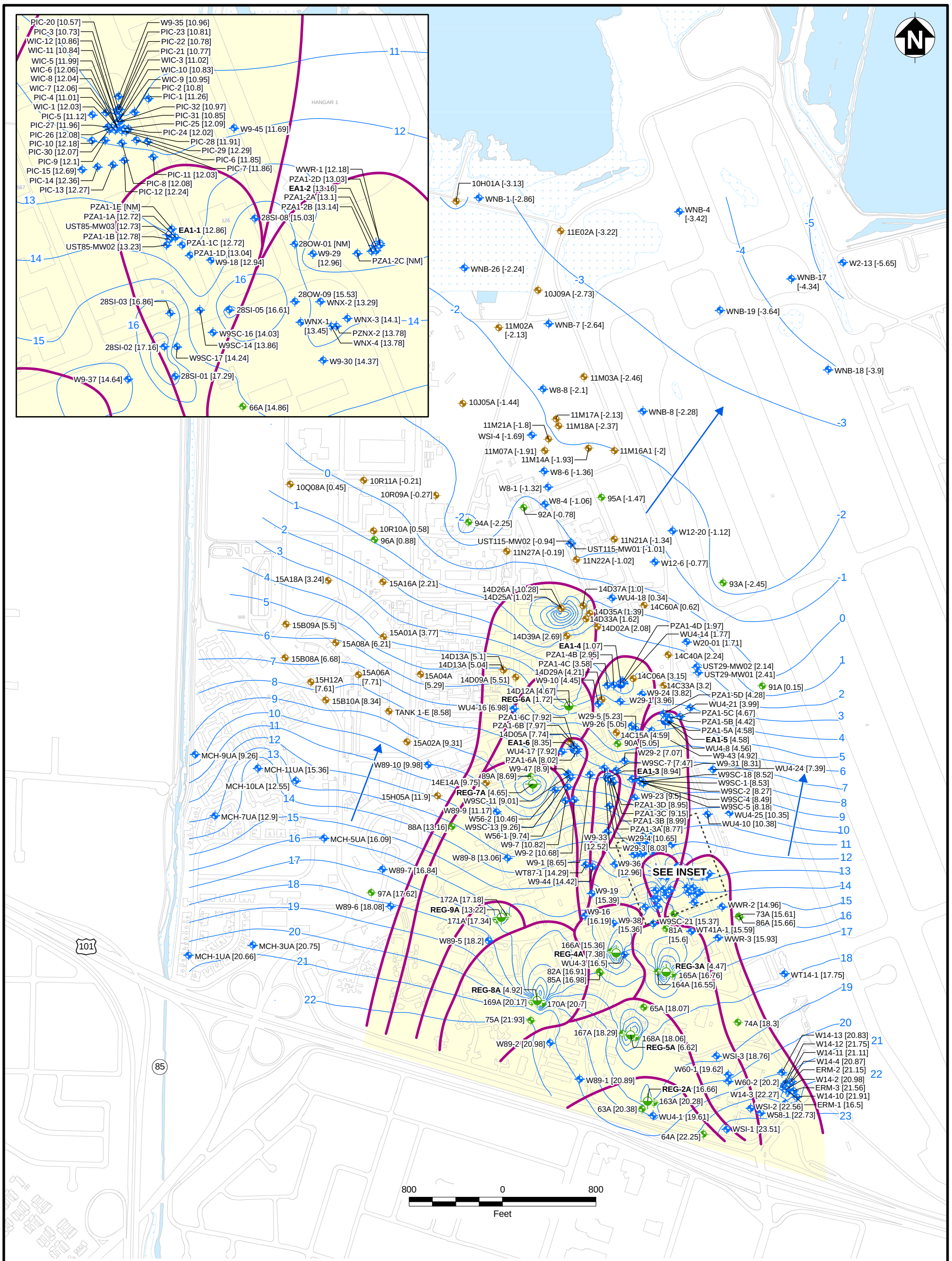
BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

2015 ANNUAL GROUNDWATER REPORT
FOR IR SITES 26 & 28

FIGURE 2-58

CAPTURE ZONE MAP, IR SITE 28, UPPER PORTION OF THE A AQUIFER MARCH 19, 2015

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA



NAVY EXTRACTION WELL

NAVY MONITORING WELL

MEW EXTRACTION WELL

MEW MONITORING WELL

NASA MONITORING WELL

(5.5) GROUNDWATER ELEVATION

ESTIMATED EXTENT OF HYDRAULIC CAPTURE

20 GROUNDWATER CONTOUR (DASHED WHERE INFERRED)

GROUNDWATER FLOW DIRECTION

ROAD

FACILITY INFRASTRUCTURE

WATER

WETLAND

Notes:

1. Groundwater levels measured on September 17, 2015
2. Groundwater elevations shown in feet amsl

AMSL - Above Mean Sea Level
IR - Installation Restoration
MEW - Middlefield-Ellis-Whisman
NAS - Naval Air Station
NASA - National Aeronautics and Space Administration
NM - Not Measured

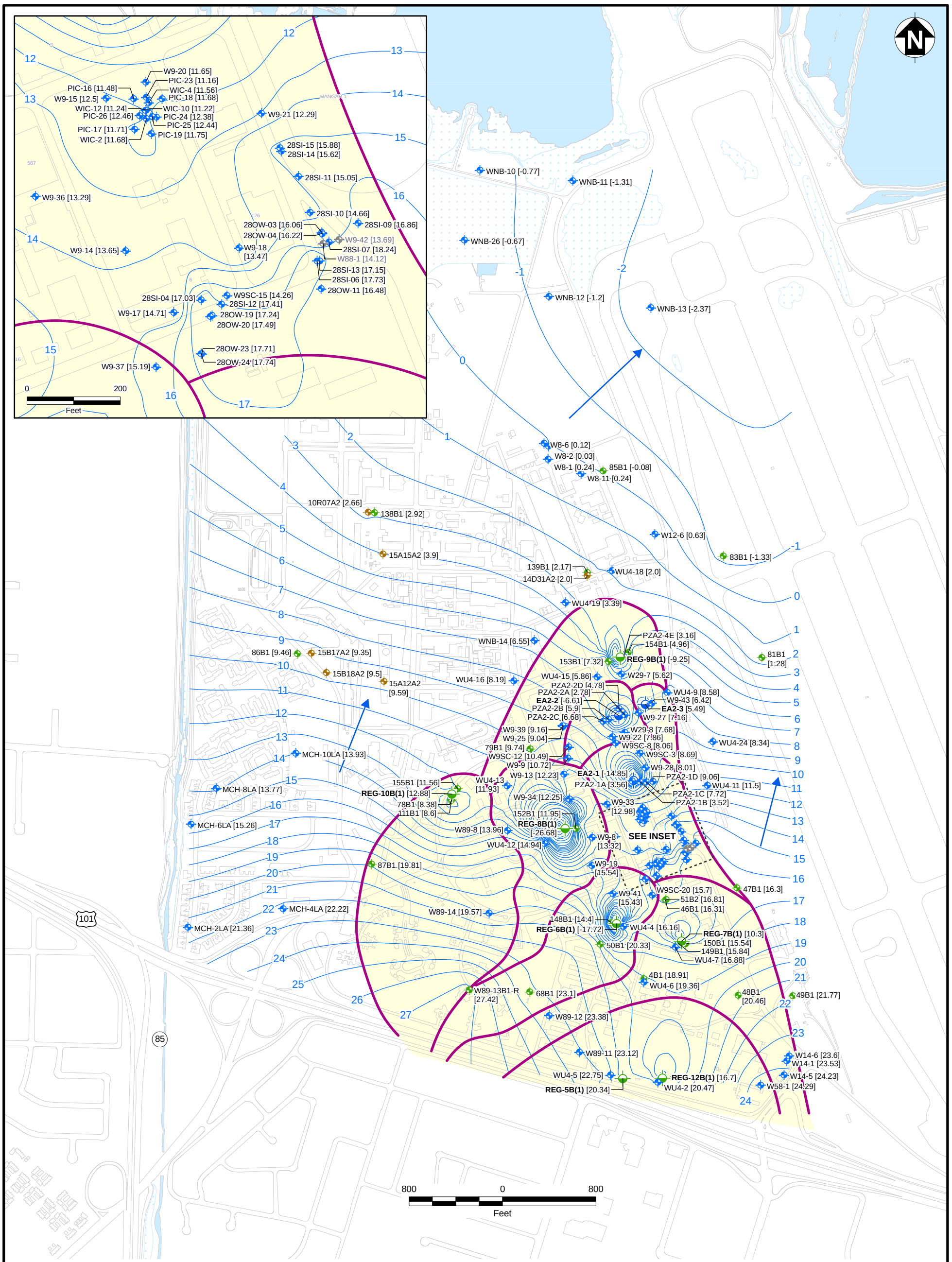
SES-TECH

BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

2015 ANNUAL GROUNDWATER REPORT
FOR IR SITES 26 & 28

FIGURE 2-59
CAPTURE ZONE MAP, IR SITE 28,
UPPER PORTION OF THE A AQUIFER -
SEPTEMBER 17, 2015

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA



NAVY EXTRACTION WELL

NAVY MONITORING WELL

MEW EXTRACTION WELL

MEW MONITORING WELL

NASA MONITORING WELL

NAVY MONITORING WELL (NOT USED IN GW MODELLING)

(5.5) GROUNDWATER ELEVATION

ESTIMATED EXTENT OF HYDRAULIC CAPTURE

20 GROUNDWATER CONTOUR (DASHED WHERE INFERRED)

GROUNDWATER FLOW DIRECTION

ROAD

FACILITY INFRASTRUCTURE

WATER

WETLAND

Notes:

1. Groundwater levels measured on March 19, 2015
2. Groundwater elevations shown in feet amsl

AMSL - Above Mean Sea Level
IR - Installation Restoration
MEW - Middlefield-Ellis-Whisman
NAS - Naval Air Station
NASA - National Aeronautics and Space Administration
NM - Not Measured

SES-TECH

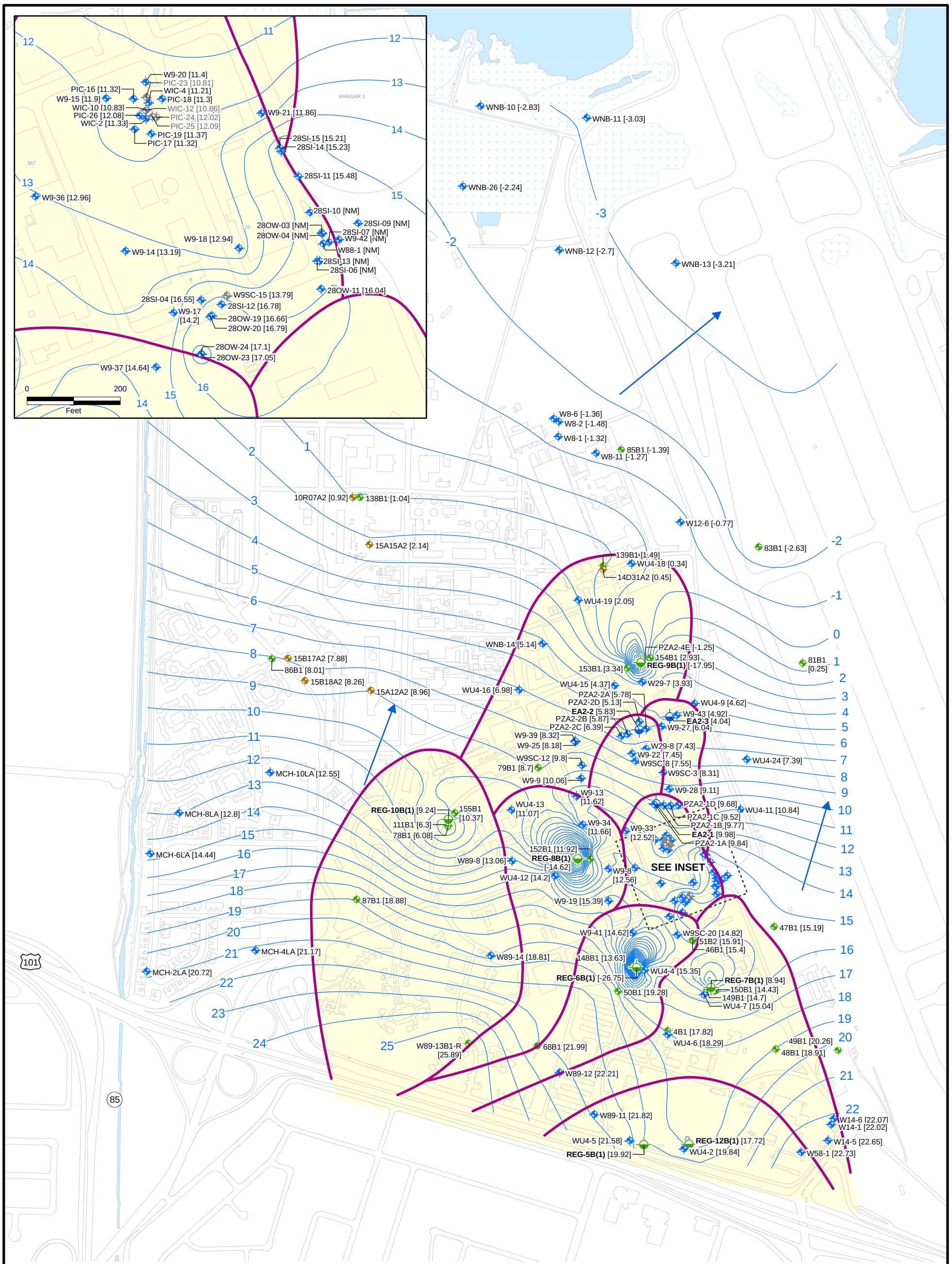
BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

2015 ANNUAL GROUNDWATER REPORT
FOR IR SITES 26 & 28

FIGURE 2-60

CAPTURE ZONE MAP, IR SITE 28, LOWER PORTION OF THE A AQUIFER - MARCH 19, 2015

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA



NAVY EXTRACTION WELL
NAVY MONITORING WELL
MEW EXTRACTION WELL
MEW MONITORING WELL
NASA MONITORING WELL
NAVY MONITORING WELL (NOT USED IN GW MODELLING)
(5.5) GROUNDWATER ELEVATION
ESTIMATED EXTENT OF HYDRAULIC CAPTURE

20 GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
GROUNDWATER FLOW DIRECTION
ROAD
FACILITY INFRASTRUCTURE
WATER
WETLAND

Notes:

1. Groundwater levels measured on September 17, 2015
2. Groundwater elevations shown in feet amsl

AMSL - Above Mean Sea Level
IR - Installation Restoration
MEW - Middlefield-Ellis-Whisman
NAS - Naval Air Station
NASA - National Aeronautics and Space Administration
NM - Not Measured

SES-TECH

BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

2015 ANNUAL GROUNDWATER REPORT
FOR IR SITES 26 & 28

FIGURE 2-61

CAPTURE ZONE MAP, IR SITE 28, LOWER PORTION OF THE A AQUIFER - SEPTEMBER 17, 2015

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA

FIGURES 2-62 THROUGH 2-65
TIME SERIES OF TCE CONCENTRATION PLOTS
WATS VICINITY

Figure 2-62 W9-2 (Upper Portion of the A Aquifer)

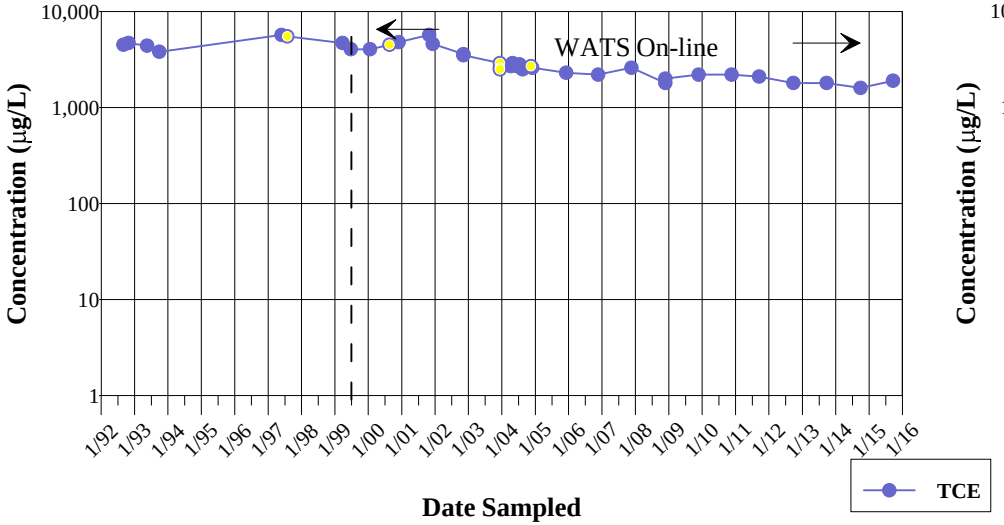


Figure 2-63 14D12A (Upper Portion of the A Aquifer)

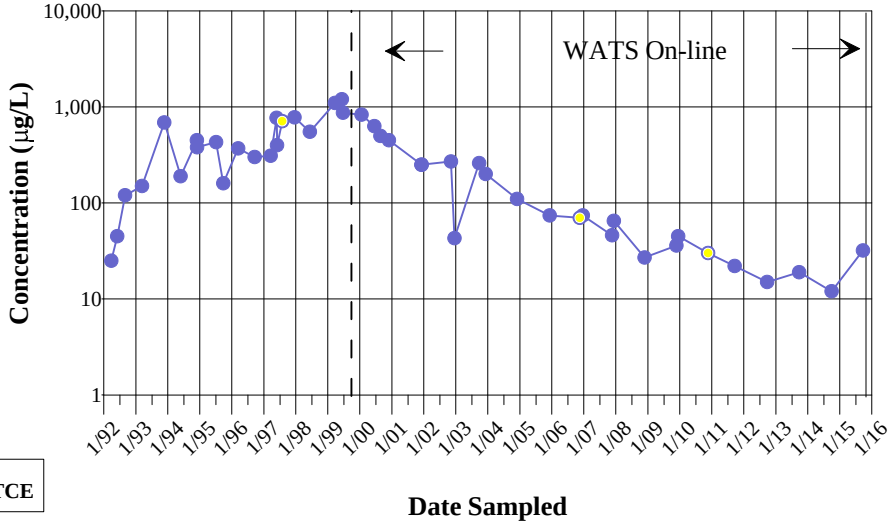


Figure 2-64 W9-10 (Upper Portion of the A Aquifer)

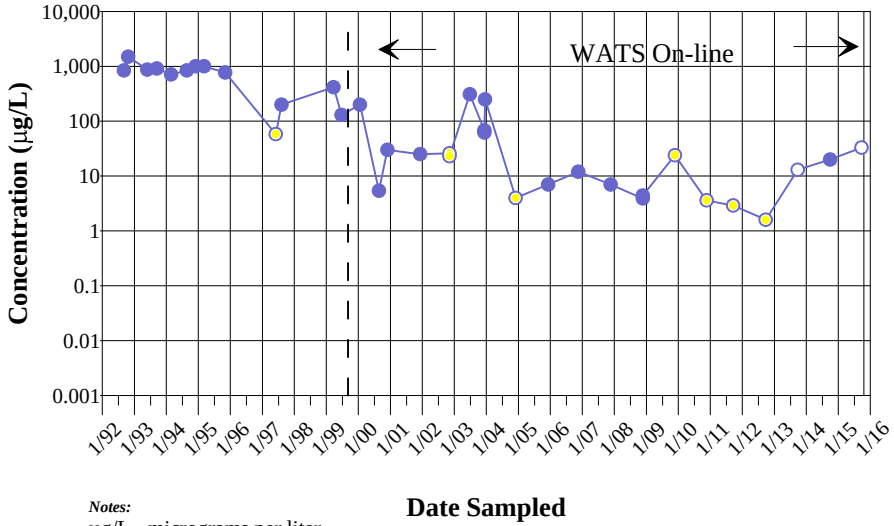
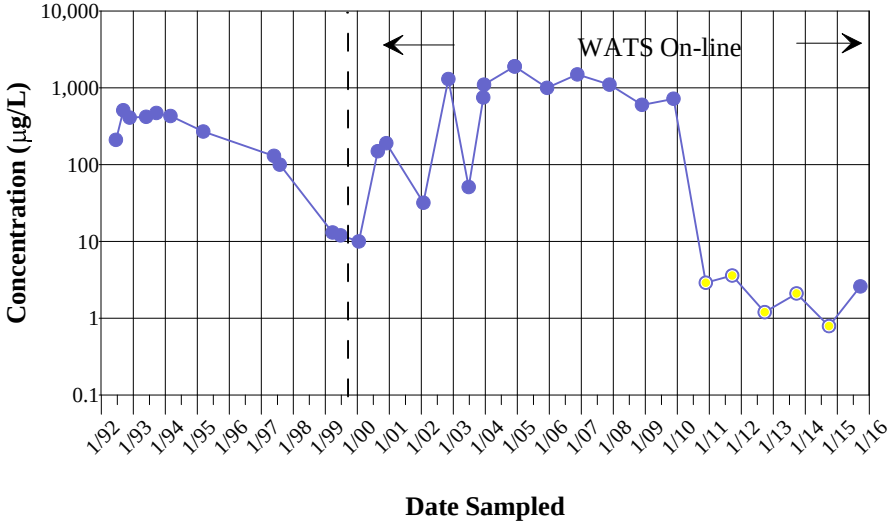


Figure 2-65 WU4-14 (Upper Portion of the A Aquifer)



Notes:
µg/L - micrograms per liter.
TCE - Trichloroethene
Open symbols indicate non-detect values. Yellow symbols indicate estimated values. Closed-line colored symbols indicate concentrations detected.
Non-detects are plotted at the reporting limits.

FIGURES 2-66 THROUGH 2-69
TIME SERIES OF TCE CONCENTRATION PLOTS
DOWNGRADIENT OF WATS

Figure 2-66 14D02A (Upper Portion of the A Aquifer)

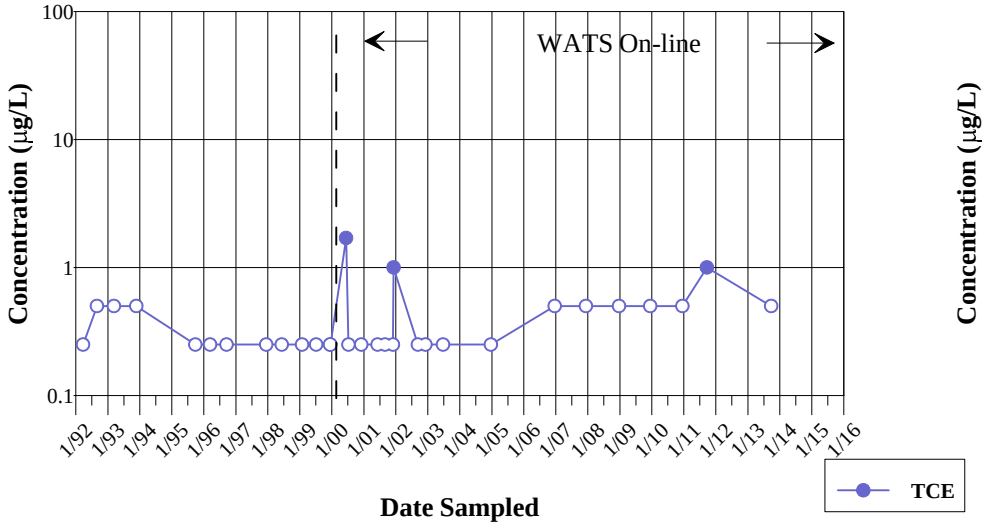


Figure 2-67 14D28A (Upper Portion of the A Aquifer)

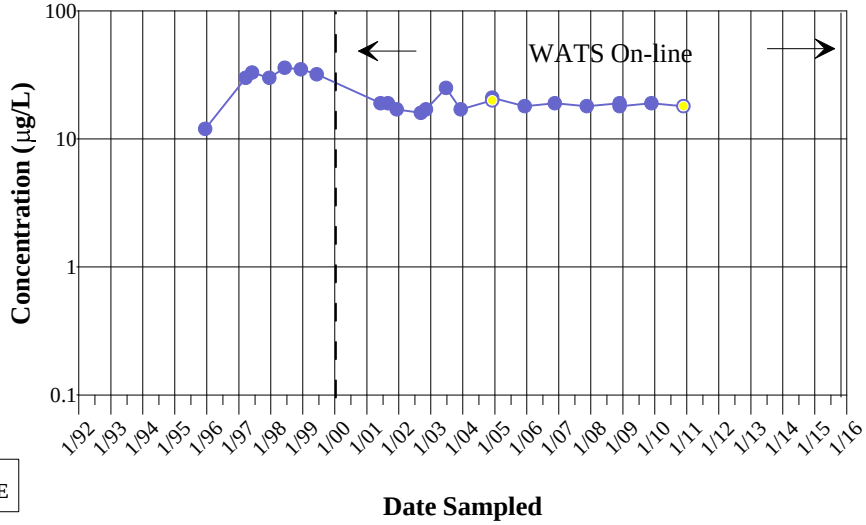


Figure 2-68 WU4-16 (Upper Portion of the A Aquifer)

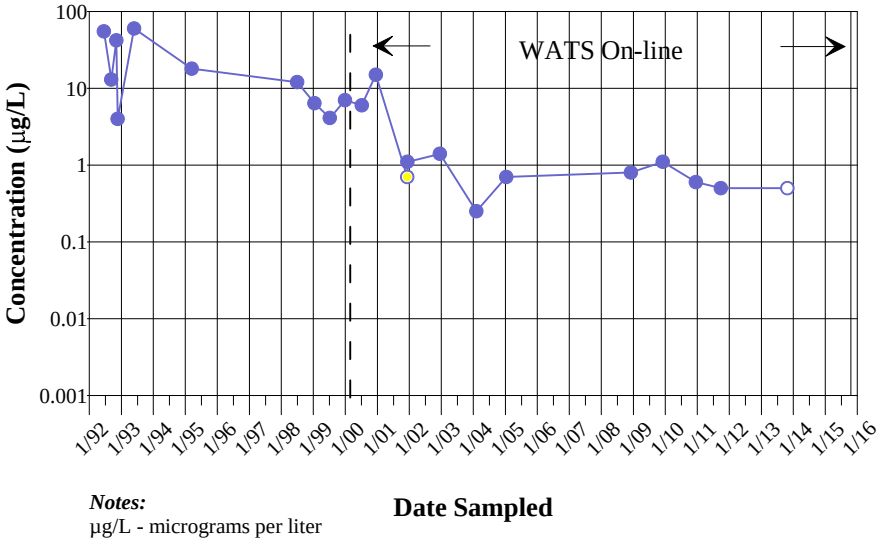
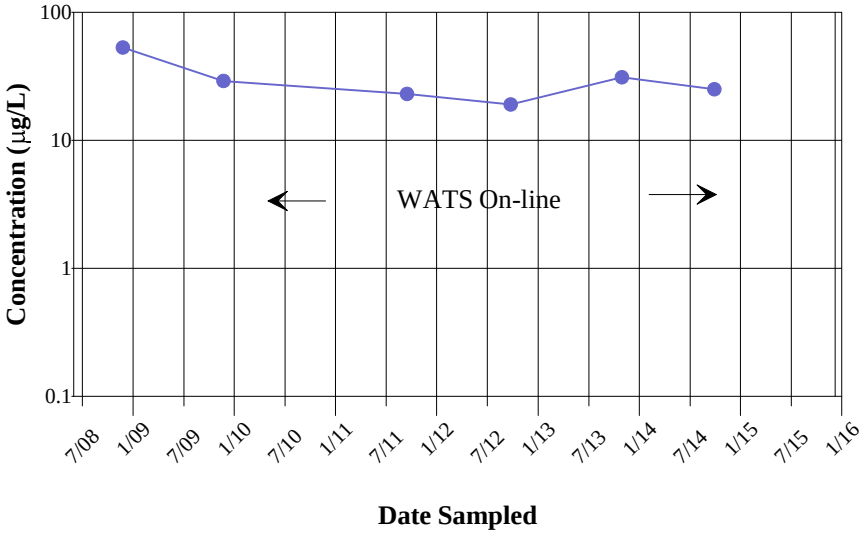


Figure 2-69 14D24A (Upper Portion of the A Aquifer)



Notes:
µg/L - micrograms per liter
TCE - Trichloroethene
Open symbols indicate non-detect values. Yellow symbols indicate estimated values. Closed-line colored symbols indicate concentrations detected.
Non-detects are plotted at the reporting limit.

FIGURES 2-70 THROUGH 2-73
TIME SERIES OF TCE CONCENTRATION PLOTS
WATS VICINITY

Figure 2-70 154B1 (Lower Portion of the A Aquifer)

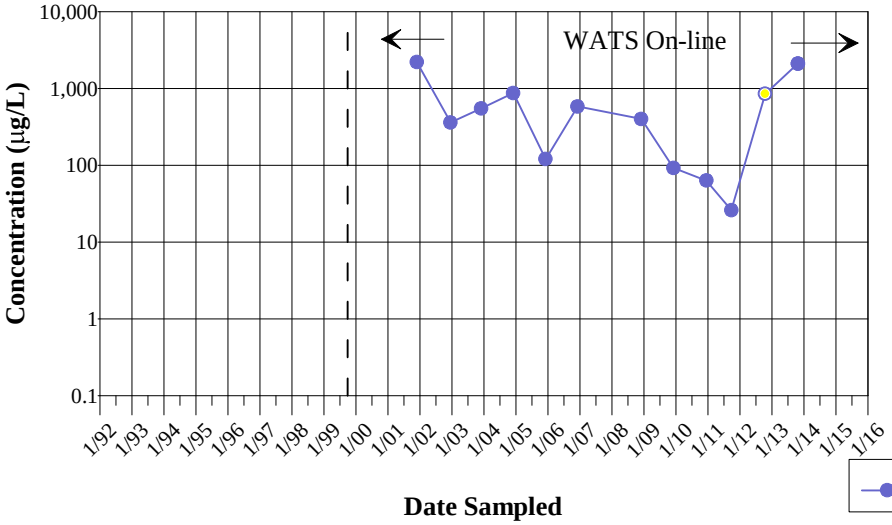
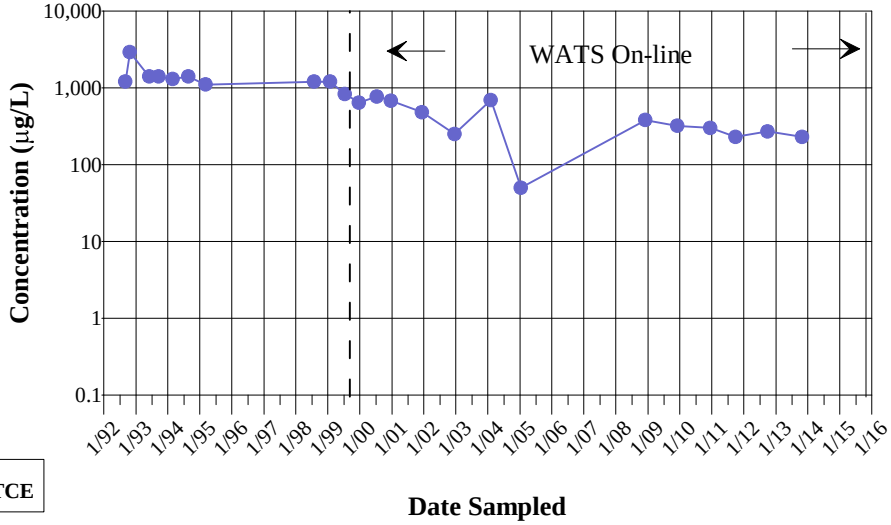


Figure 2-71 W9-25 (Lower Portion of the A Aquifer)



TCE

Figure 2-72 W29-7 (Lower Portion of the A Aquifer)

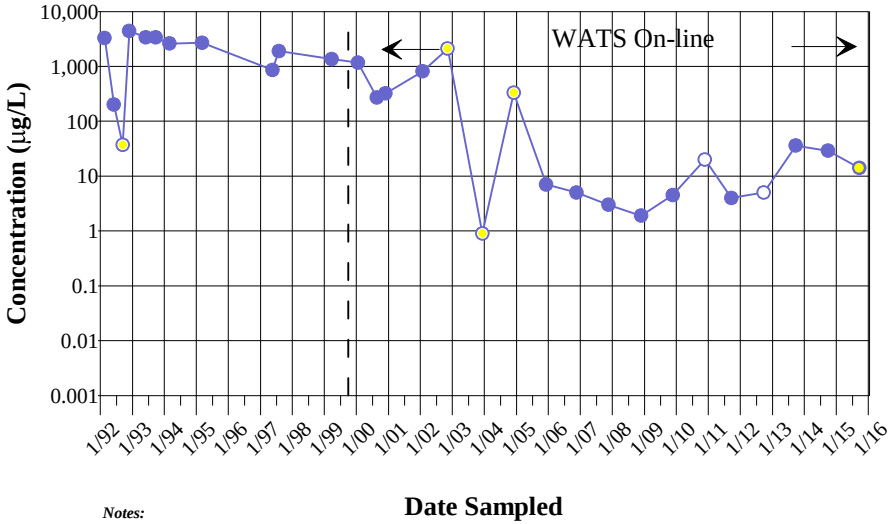
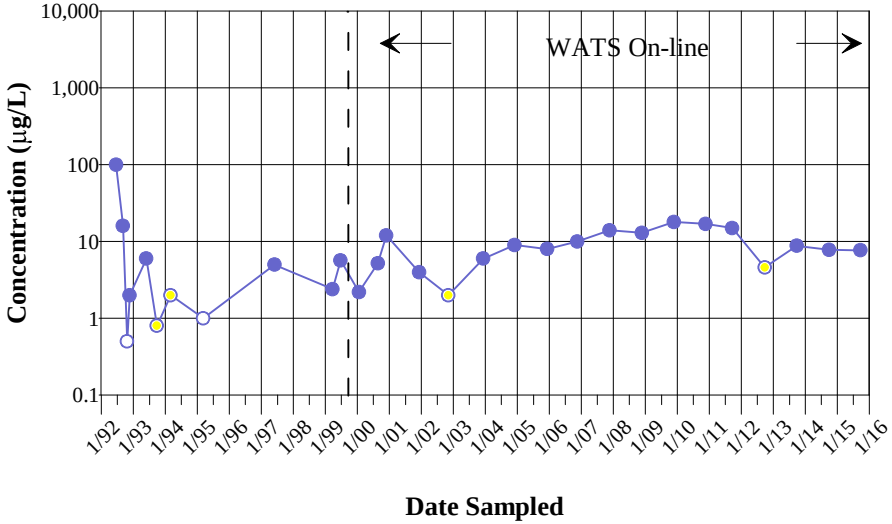


Figure 2-73 WU4-15 (Lower Portion of the A Aquifer)



Notes:
µg/L - micrograms per liter
TCE - Trichloroethene
Open symbols indicate non-detect values. Yellow symbols indicate estimated values. Closed-line colored symbols indicate concentrations detected.
Non-detects are plotted at the reporting limits.

FIGURES 2-74 THROUGH 2-76
TIME SERIES OF TCE CONCENTRATION PLOTS
DOWNGRADIENT OF WATS

Figure 2-74 139B1 (Lower Portion of the A Aquifer)

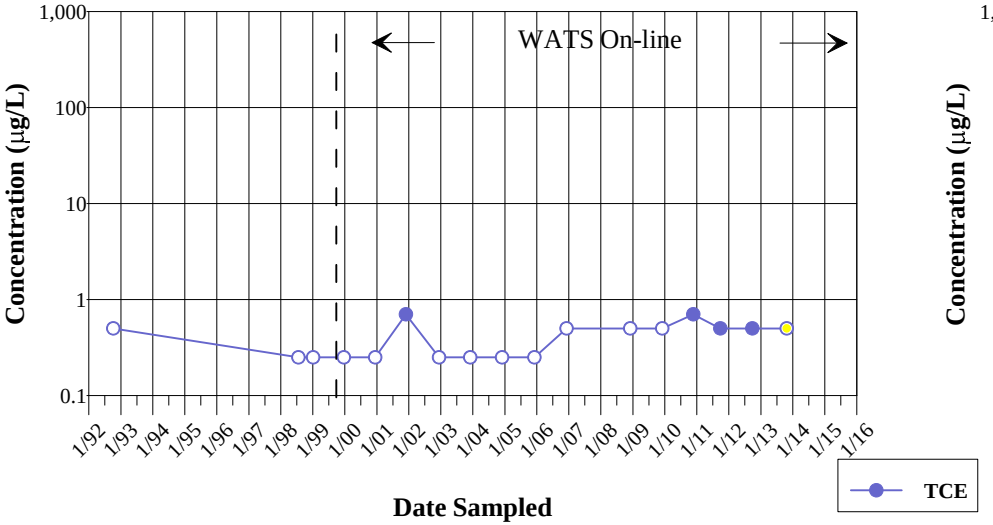


Figure 2-75 WNB-14 (Lower Portion of the A Aquifer)

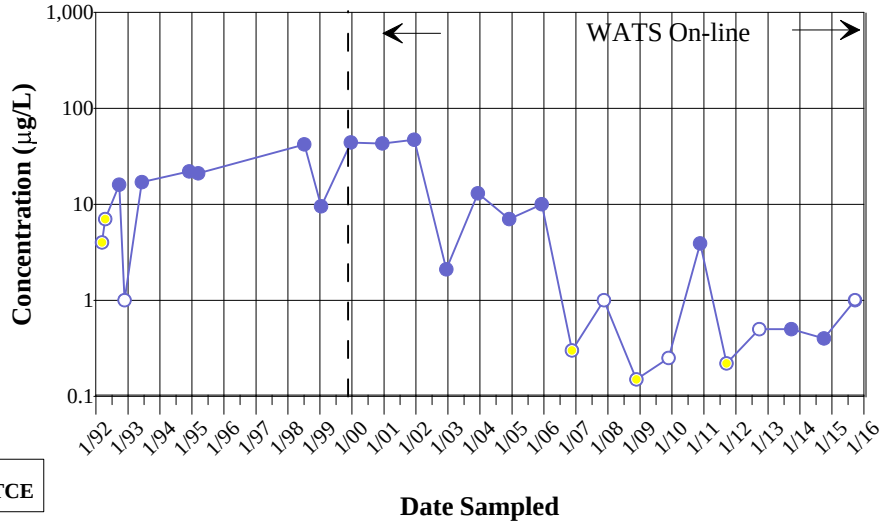
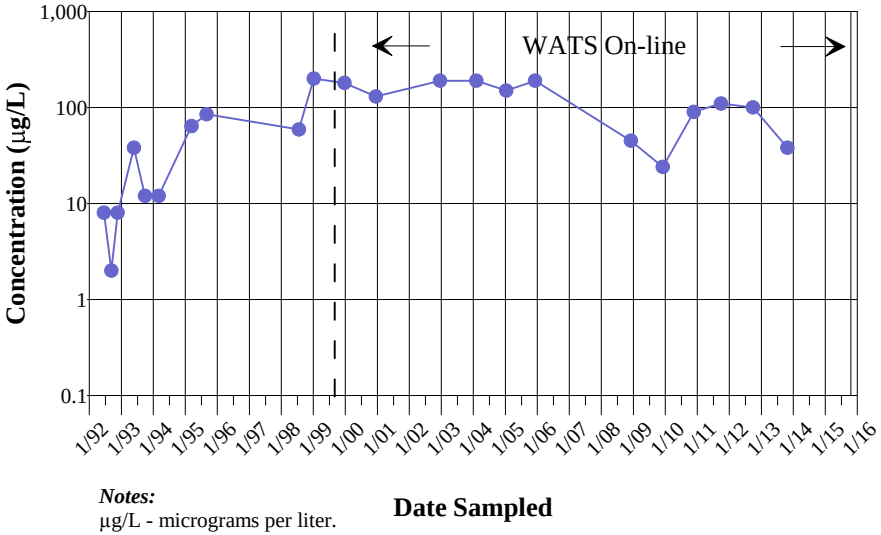


Figure 2-76 WU4-19 (Lower Portion of the A Aquifer)



Notes:
µg/L - micrograms per liter.
TCE - Trichloroethene.
Open symbols indicate non-detect values. Yellow symbols indicate estimated values. Closed-line colored symbols indicate concentrations detected.
Non-detects are plotted at the reporting limits.

FIGURES 2-77 THROUGH 2-80
TIME SERIES OF VOCs CONCENTRATION PLOTS
IR SITE 28

Figure 2-77 14C33A (Upper Portion of the A Aquifer)

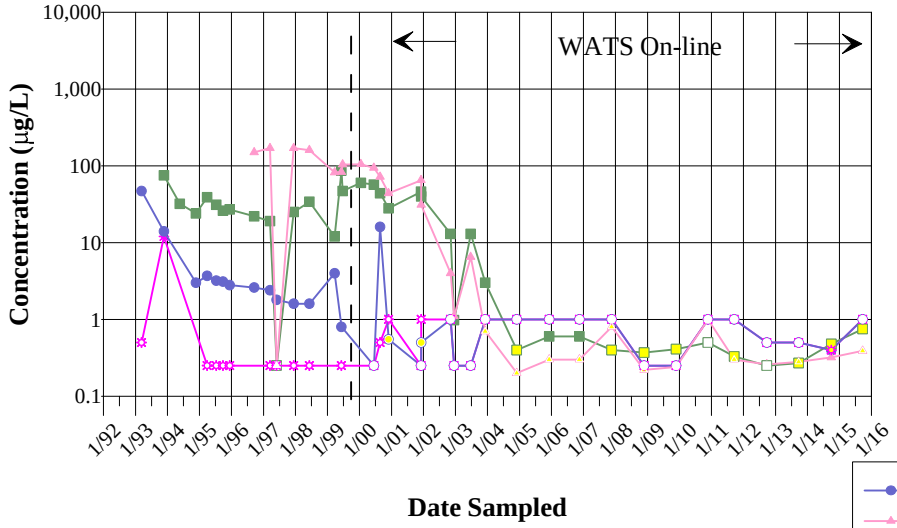
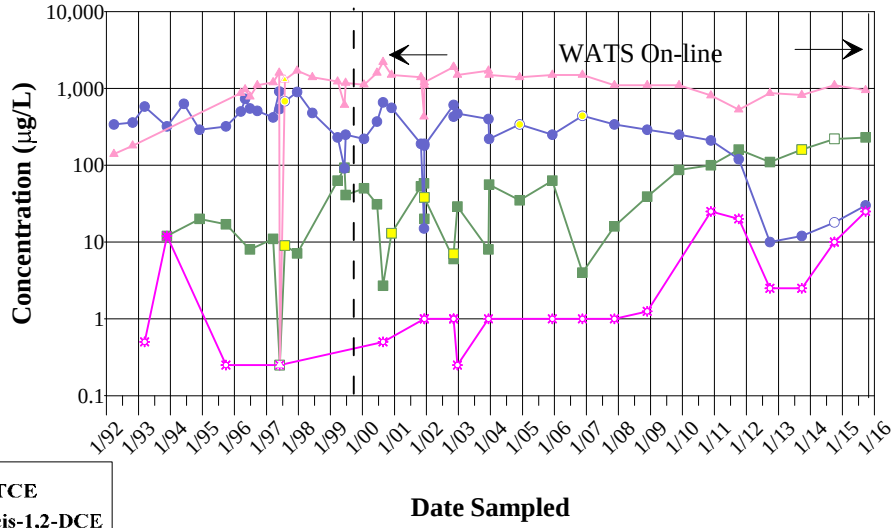


Figure 2-78 14D05A (Upper Portion of the A Aquifer)



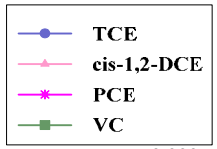


Figure 2-79 W9-2 (Upper Portion of the A Aquifer)

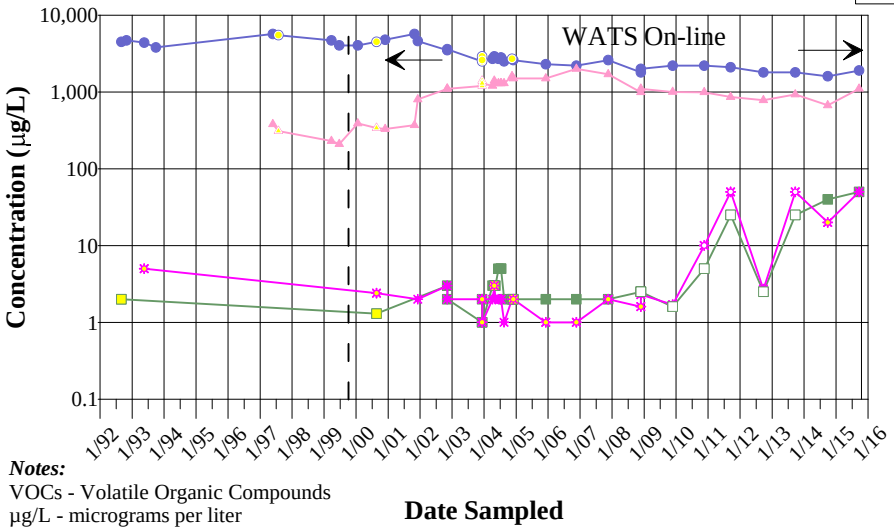
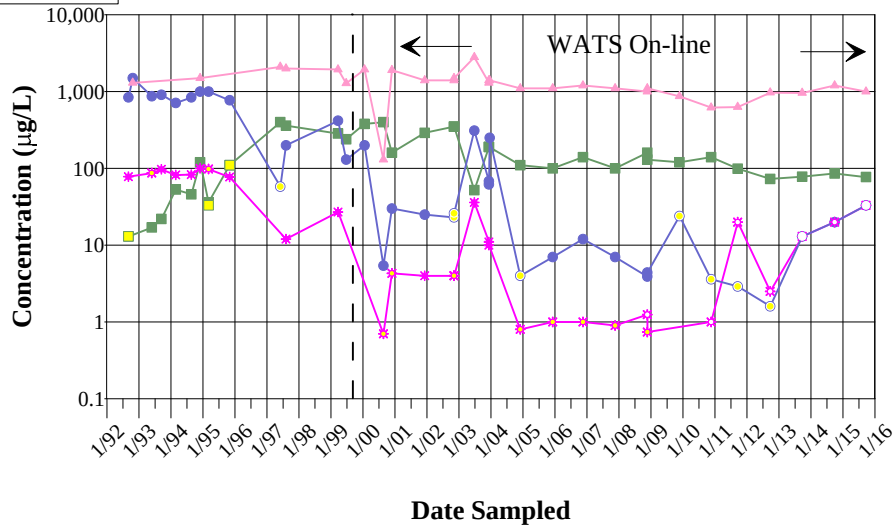


Figure 2-80 W9-10 (Upper Portion of the A Aquifer)



Notes:
VOCs - Volatile Organic Compounds
µg/L - micrograms per liter
TCE - trichloroethene; cis-1,2-DCE - cis-1,2,-dichloroethene; PCE - tetrachloroethene; VC - vinyl chloride
Open symbols indicate non-detect values. Yellow symbols indicate estimated values. Closed-line colored symbols indicate concentrations detected.
Non-detects are plotted at the reporting limits.

FIGURES 2-81 THROUGH 2-84
TIME SERIES OF VOCs CONCENTRATION PLOTS
IR SITE 28

Figure 2-81 W9-18 (Upper Portion of the A Aquifer)

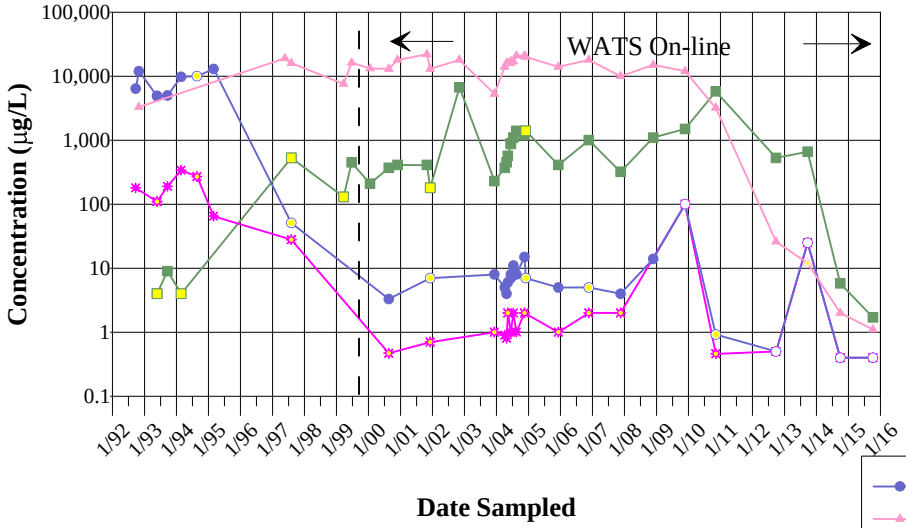
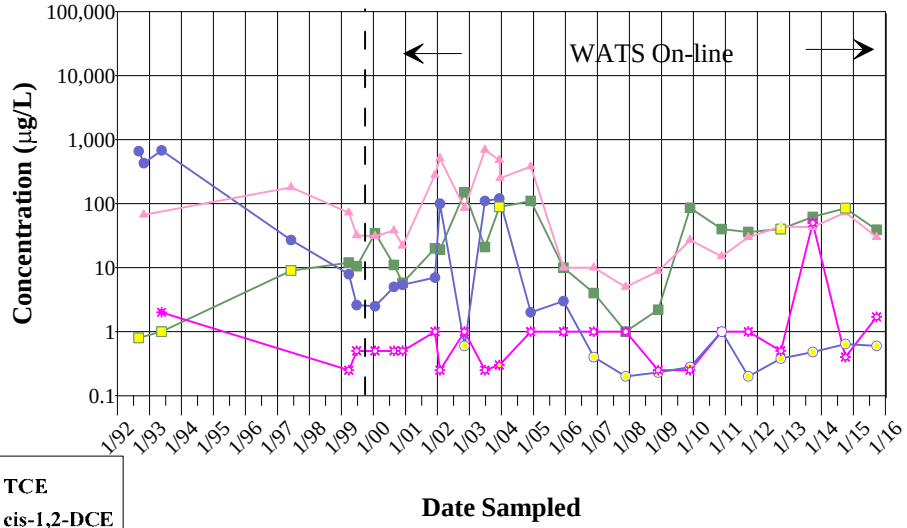


Figure 2-82 W9-19 (Upper Portion of the A Aquifer)



TCE
cis-1,2-DCE
PCE
VC

Figure 2-83 W9SC-1 (Upper Portion of the A Aquifer)

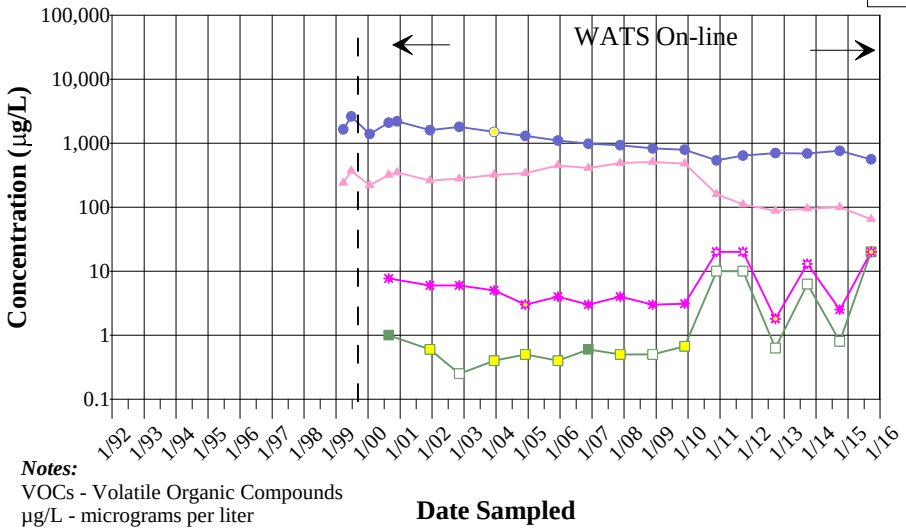
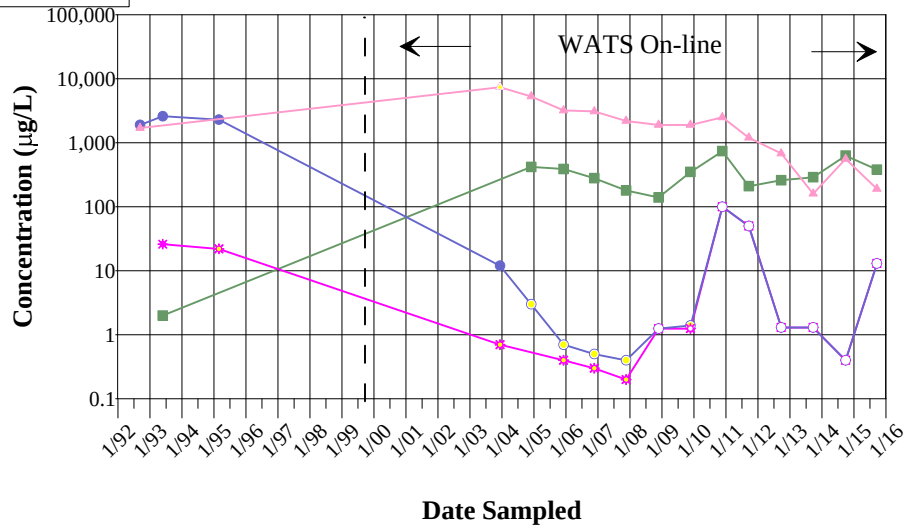


Figure 2-84 W9-31 (Upper Portion of the A Aquifer)



Notes:
VOCs - Volatile Organic Compounds
µg/L - micrograms per liter
TCE - trichloroethene; cis-1,2-DCE - cis-1,2,-dichloroethene; PCE - tetrachloroethene; VC - vinyl chloride
Open symbols indicate non-detect values. Yellow symbols indicate estimated values. Closed-line colored symbols indicate concentrations detected.
Non-detects are plotted at the reporting limits.

FIGURES 2-85 THROUGH 2-88
TIME SERIES OF VOCs CONCENTRATION PLOTS
IR SITE 28

Figure 2-85 W9-37 (Upper Portion of the A Aquifer)

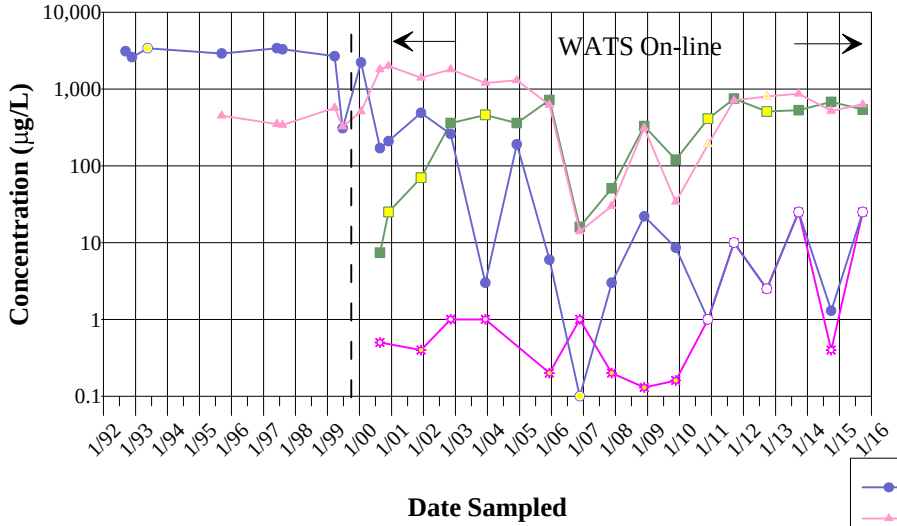
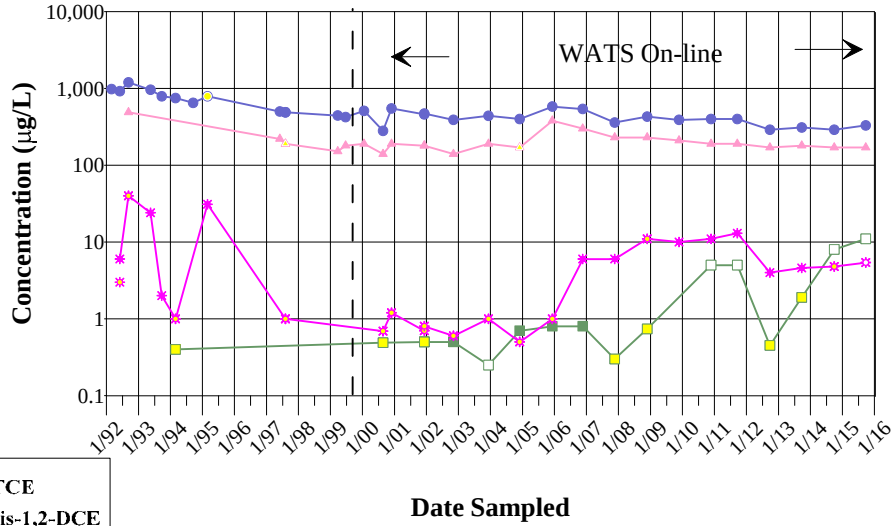


Figure 2-86 W9-45 (Upper Portion of the A Aquifer)



TCE
cis-1,2-DCE
PCE
VC

Figure 2-87 W9SC-7 (Upper Portion of the A Aquifer)

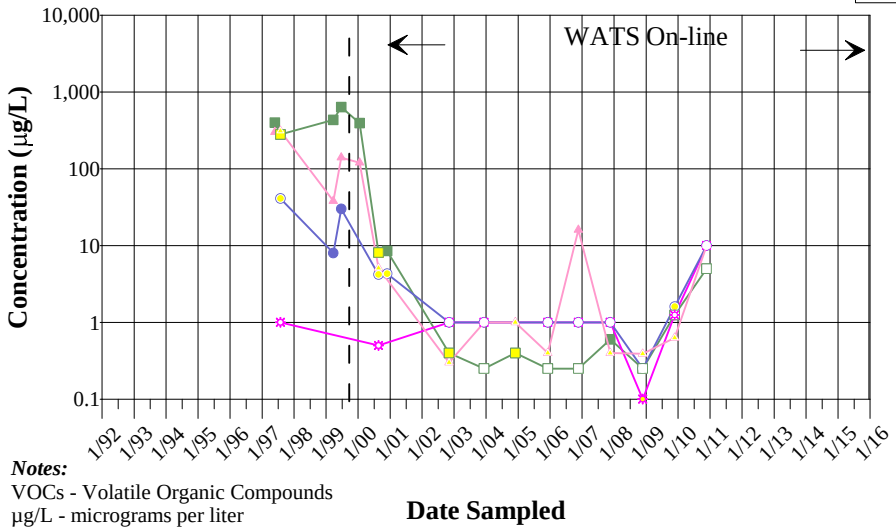
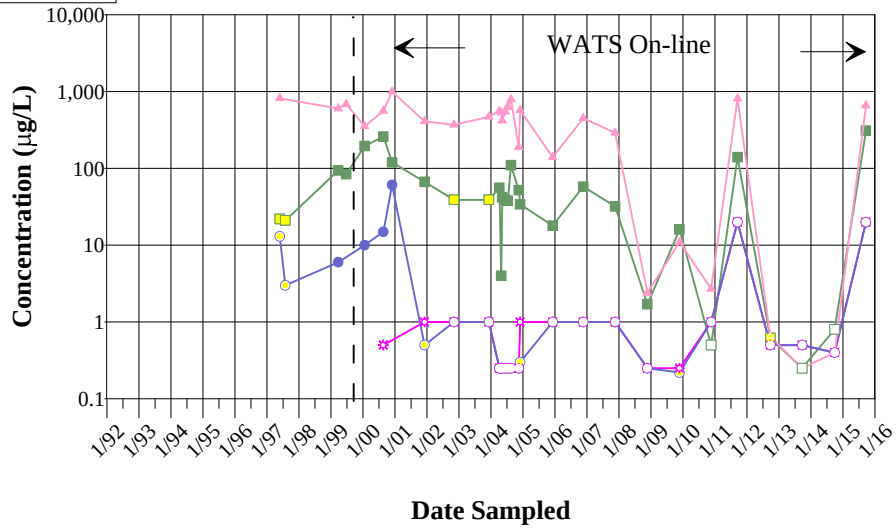


Figure 2-88 W9SC-13 (Upper Portion of the A Aquifer)



Notes:
VOCs - Volatile Organic Compounds
µg/L - micrograms per liter
TCE - trichloroethene; cis-1,2-DCE - cis-1,2,-dichloroethene; PCE - tetrachloroethene; VC - vinyl chloride
Open symbols indicate non-detect values. Yellow symbols indicate estimated values. Closed-line colored symbols indicate concentrations detected.
Non-detects are plotted at the reporting limits.

FIGURES 2-89 THROUGH 2-92
TIME SERIES OF VOCs CONCENTRATION PLOTS
IR SITE 28

Figure 2-89 W9SC-14 (Upper Portion of the A Aquifer)

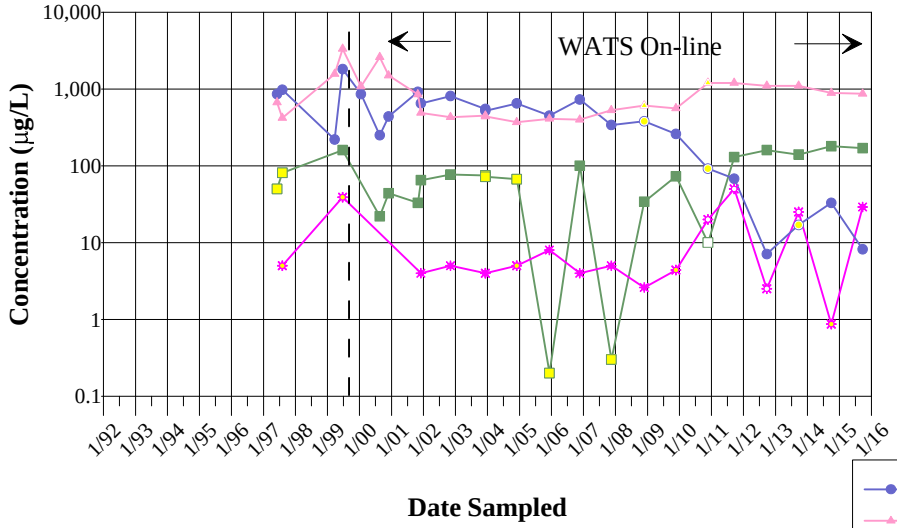
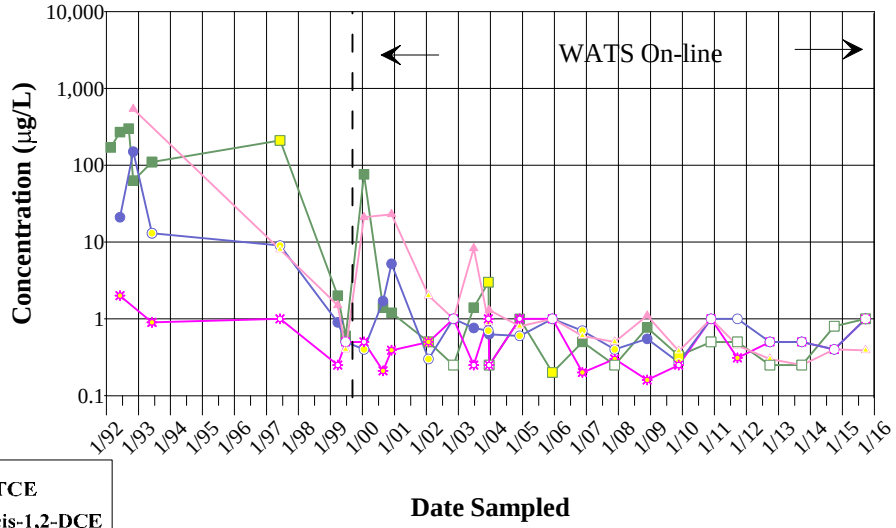


Figure 2-90 W29-1 (Upper Portion of the A Aquifer)



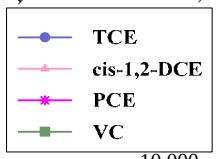


Figure 2-91 W29-3 (Upper Portion of the A Aquifer)

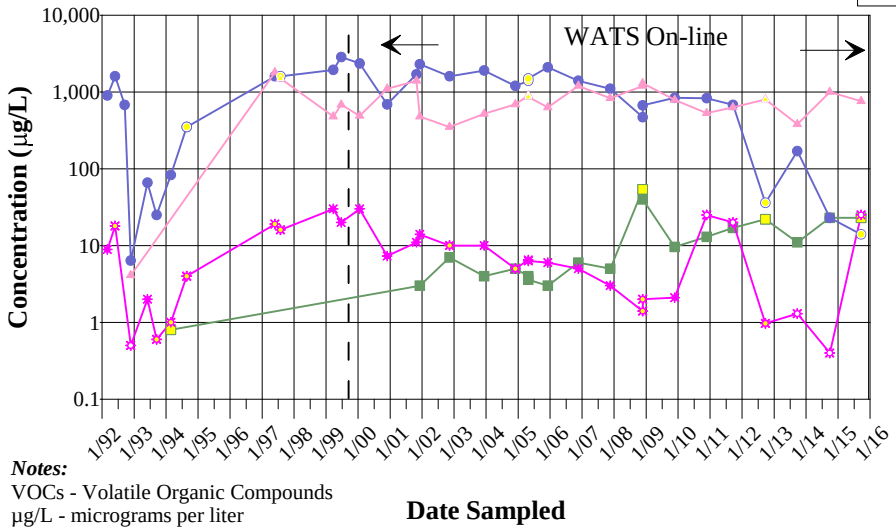
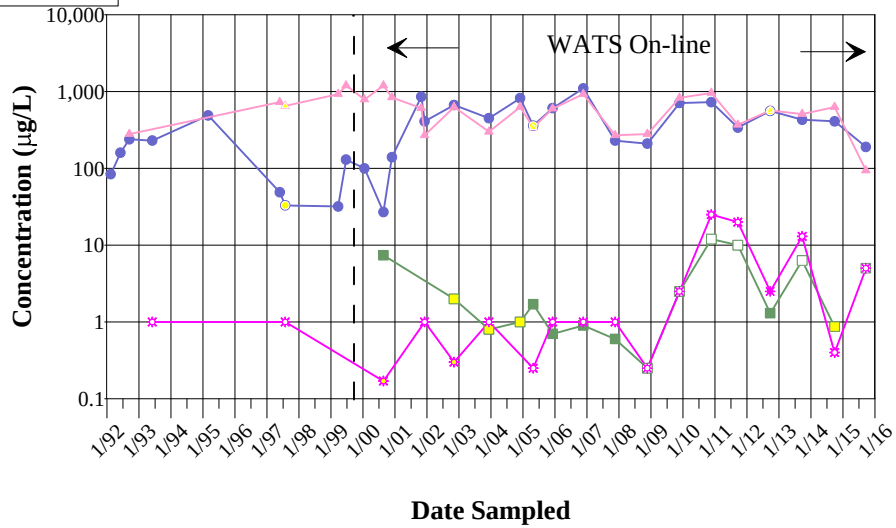


Figure 2-92 W29-4 (Upper Portion of the A Aquifer)



Notes:
VOCs - Volatile Organic Compounds
µg/L - micrograms per liter
TCE - trichloroethene; cis-1,2-DCE - cis-1,2,-dichloroethene; PCE - tetrachloroethene; VC - vinyl chloride
Open symbols indicate non-detect values. Yellow symbols indicate estimated values. Closed-line colored symbols indicate concentrations detected.
Non-detects are plotted at the reporting limits.

FIGURES 2-93 THROUGH 2-96
TIME SERIES OF VOCs CONCENTRATION PLOTS
IR SITE 28

Figure 2-93 W56-2 (Upper Portion of the A Aquifer)

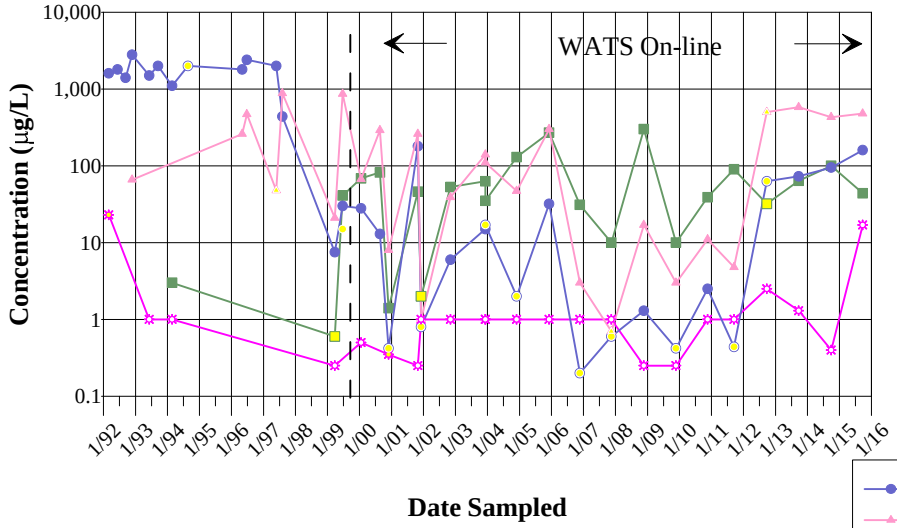
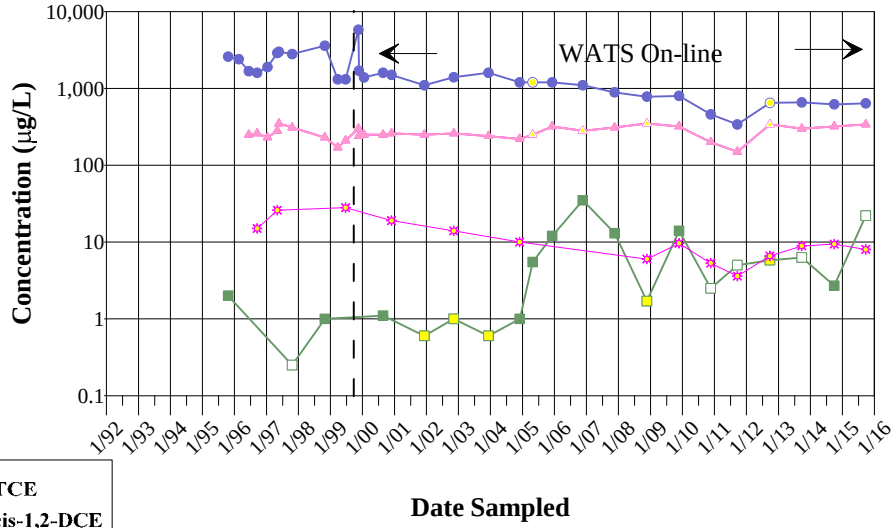


Figure 2-94 WIC-1 (Upper Portion of the A Aquifer)



TCE
cis-1,2-DCE
PCE
VC

Figure 2-95 WU4-8 (Upper Portion of the A Aquifer)

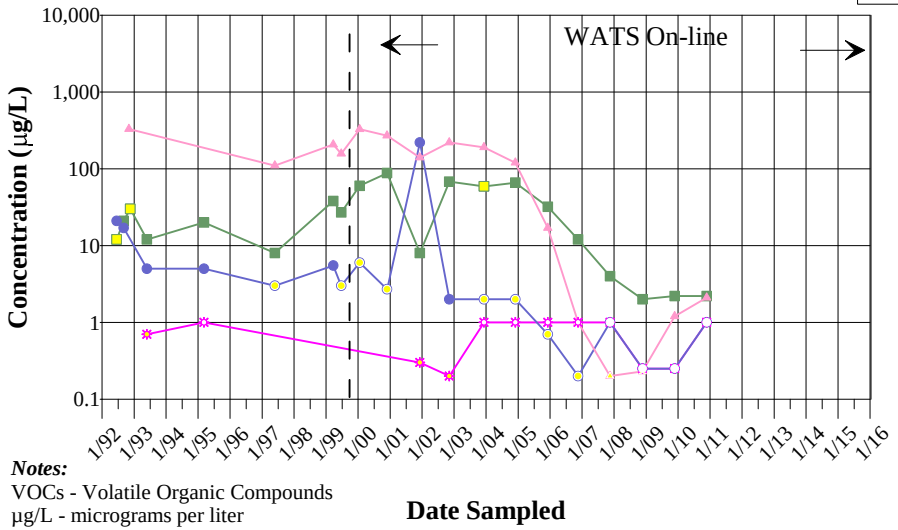
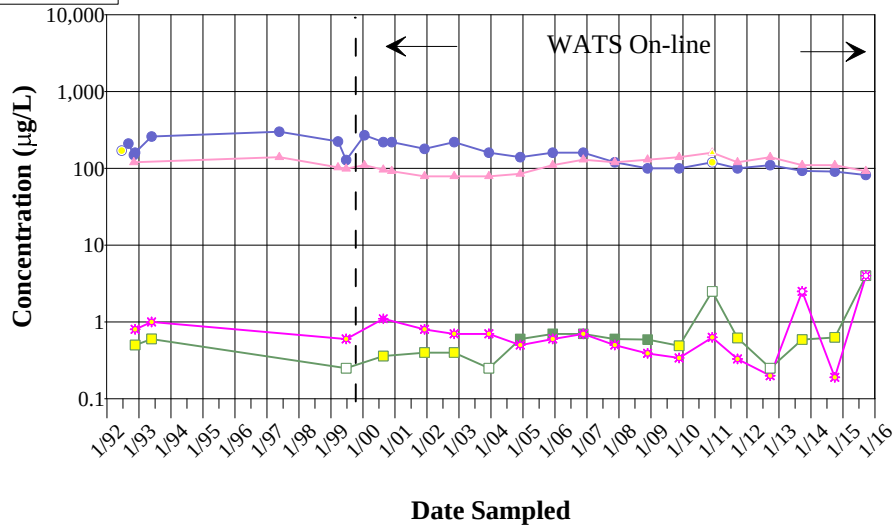


Figure 2-96 WU4-10 (Upper Portion of the A Aquifer)



Notes:
VOCs - Volatile Organic Compounds
µg/L - micrograms per liter
TCE - trichloroethene; cis-1,2-DCE - cis-1,2,-dichloroethene; PCE - tetrachloroethene; VC - vinyl chloride
Open symbols indicate non-detect values. Yellow symbols indicate estimated values. Closed-line colored symbols indicate concentrations detected.
Non-detects are plotted at the reporting limits.

FIGURES 2-97 THROUGH 2-100
TIME SERIES OF VOCs CONCENTRATION PLOTS
IR SITE 28

Figure 2-97 WU4-14 (Upper Portion of the A Aquifer)

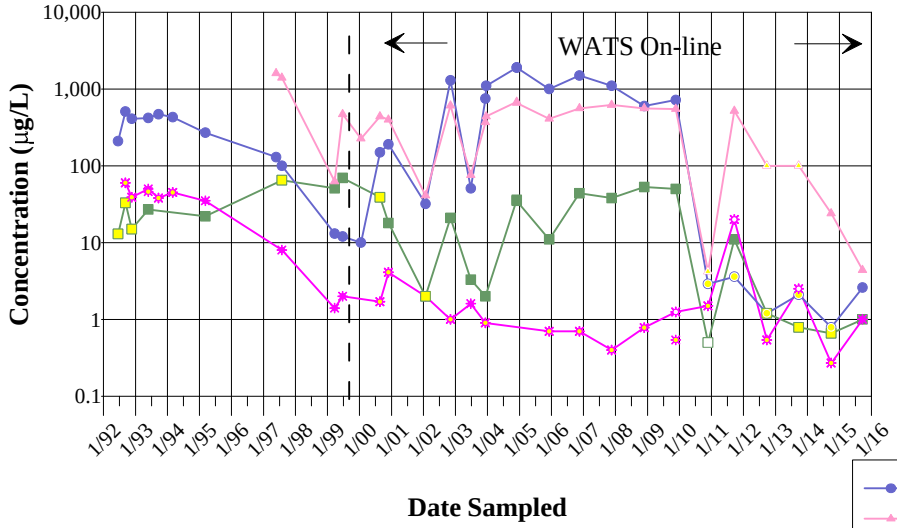
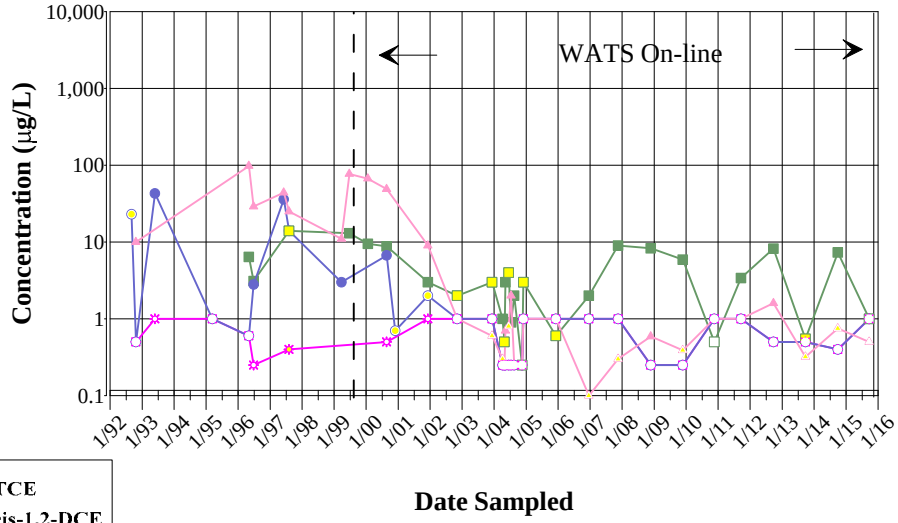


Figure 2-98 WU4-17 (Upper Portion of the A Aquifer)



TCE
cis-1,2-DCE
PCE
VC

Figure 2-99 WU4-21 (Upper Portion of the A Aquifer)

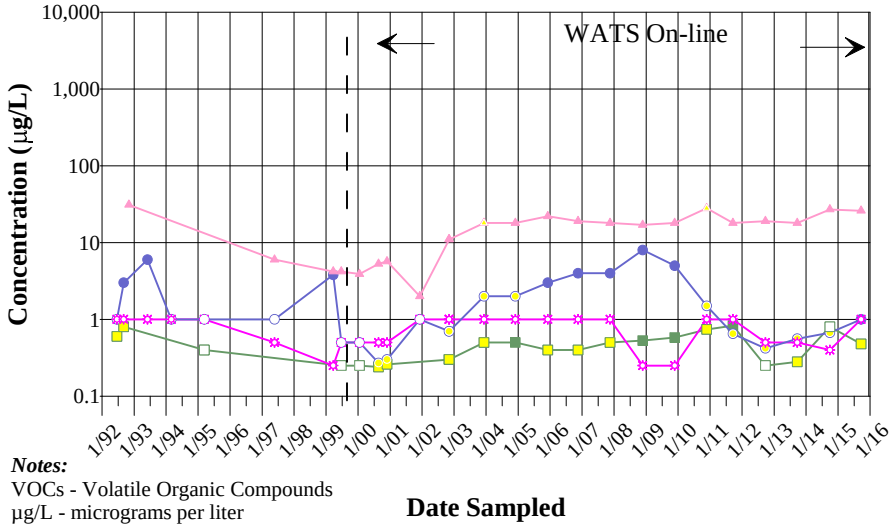
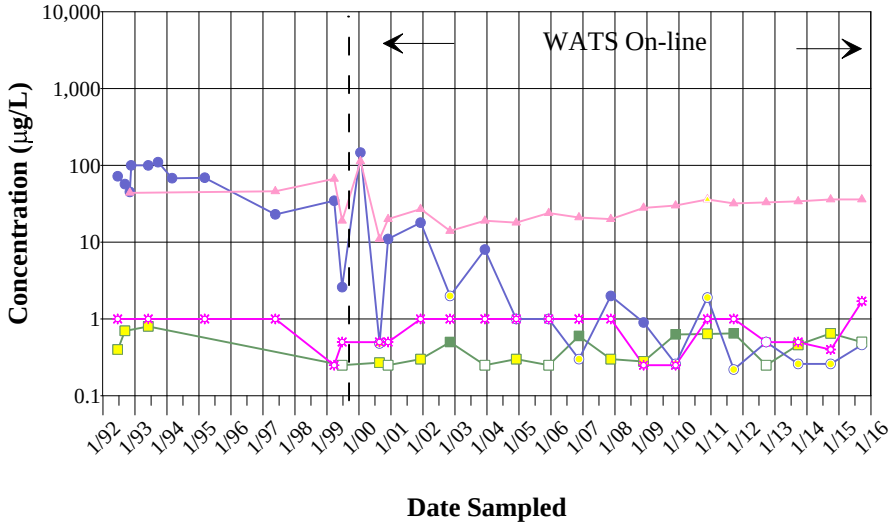


Figure 2-100 WU4-25 (Upper Portion of the A Aquifer)



Notes:
VOCs - Volatile Organic Compounds
µg/L - micrograms per liter
TCE - trichloroethene; cis-1,2-DCE - cis-1,2,-dichloroethene; PCE - tetrachloroethene; VC - vinyl chloride
Open symbols indicate non-detect values. Yellow symbols indicate estimated values. Closed-line colored symbols indicate concentrations detected.
Non-detects are plotted at the reporting limits.

FIGURES 2-101 THROUGH 2-104
TIME SERIES OF VOCs CONCENTRATION PLOTS
IR SITE 28

Figure 2-101 WWR-1 (Upper Portion of the A Aquifer)

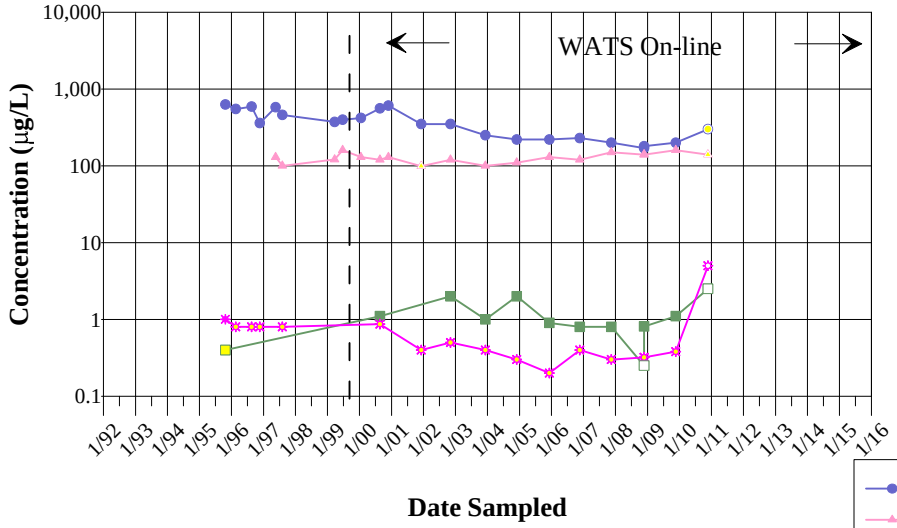
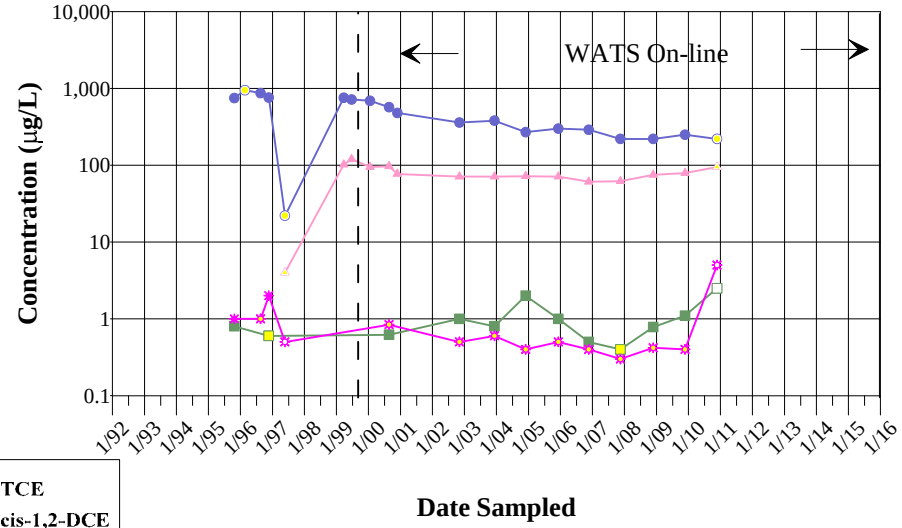


Figure 2-102 WWR-2 (Upper Portion of the A Aquifer)



TCE
cis-1,2-DCE
PCE
VC

Figure 2-103 80B1 (Lower Portion of the A Aquifer)

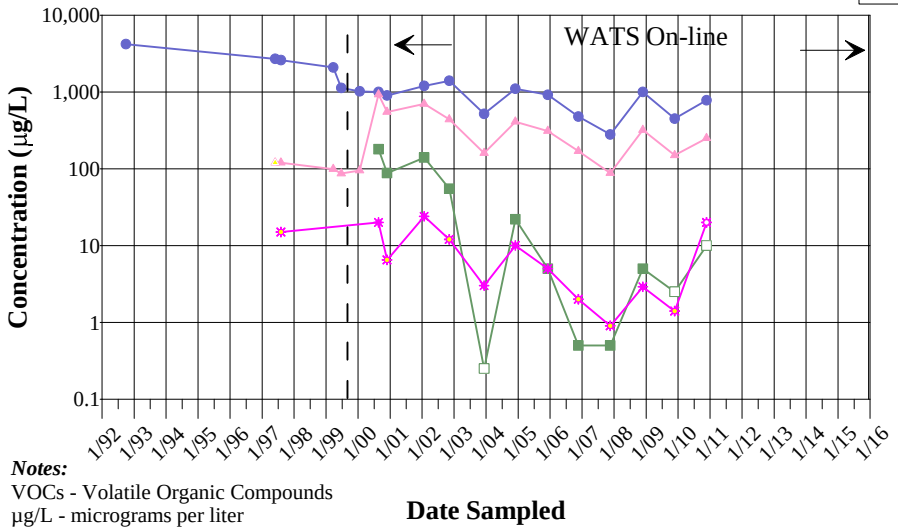
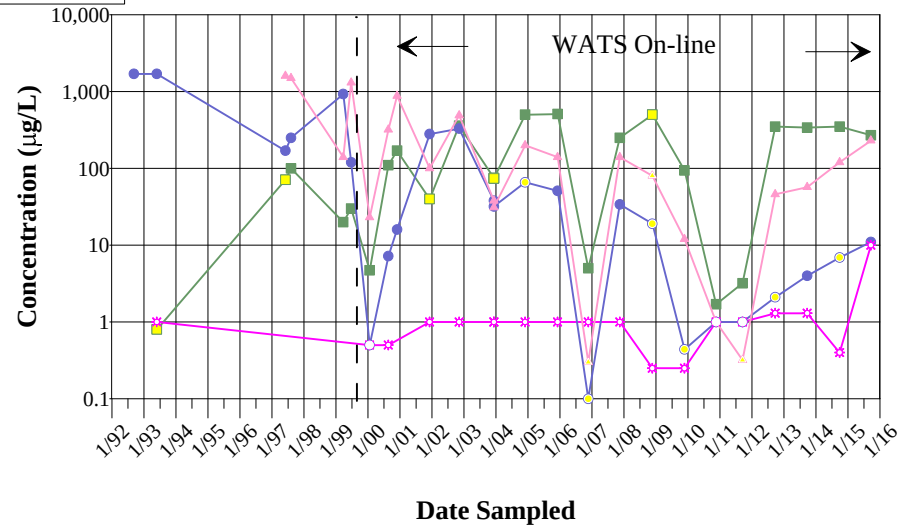


Figure 2-104 W9-9 (Lower Portion of the A Aquifer)



Notes:
VOCs - Volatile Organic Compounds
µg/L - micrograms per liter
TCE - trichloroethene; cis-1,2-DCE - cis-1,2,-dichloroethene; PCE - tetrachloroethene; VC - vinyl chloride
Open symbols indicate non-detect values. Yellow symbols indicate estimated values. Closed-line colored symbols indicate concentrations detected.
Non-detects are plotted at the reporting limits.

FIGURES 2-105 THROUGH 2-108
TIME SERIES OF VOCs CONCENTRATION PLOTS
IR SITE 28

Figure 2-105 W9-14 (Lower Portion of the A Aquifer)

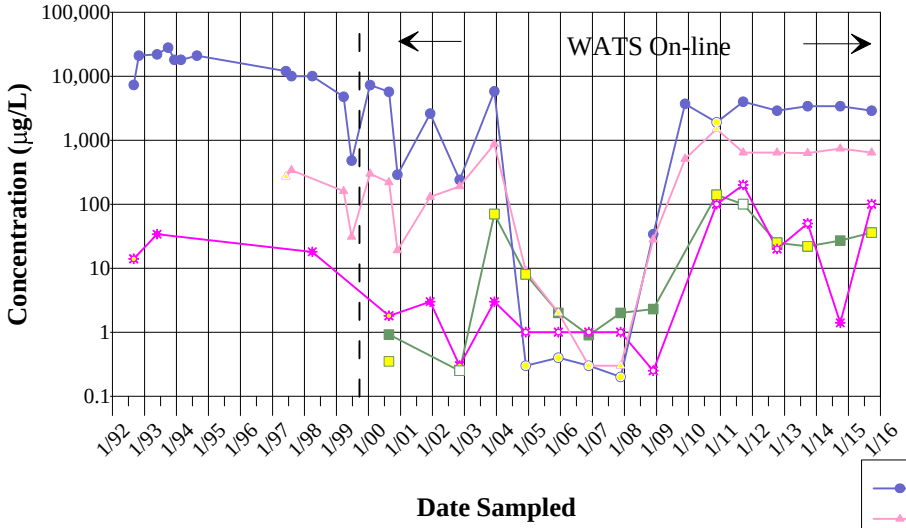
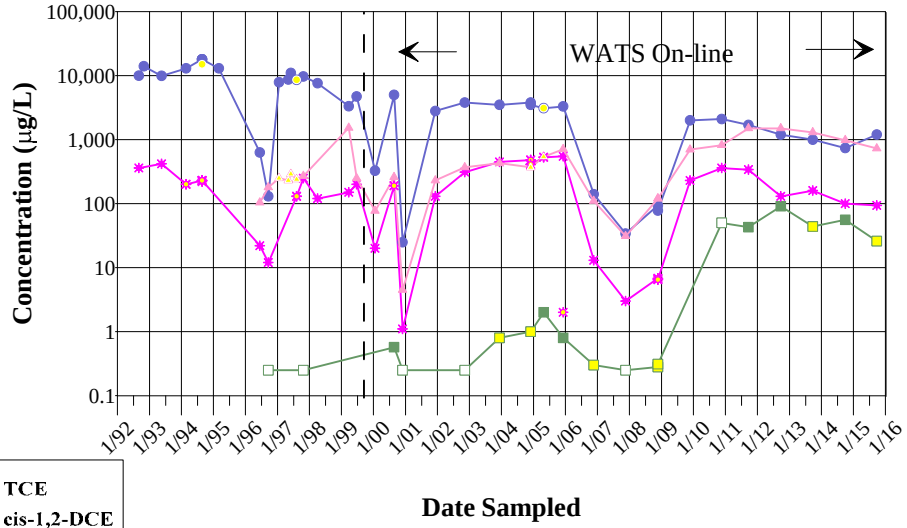


Figure 2-106 W9-20 (Lower Portion of the A Aquifer)



TCE
cis-1,2-DCE
PCE
VC

Figure 2-107 W9-21 (Lower Portion of the A Aquifer)

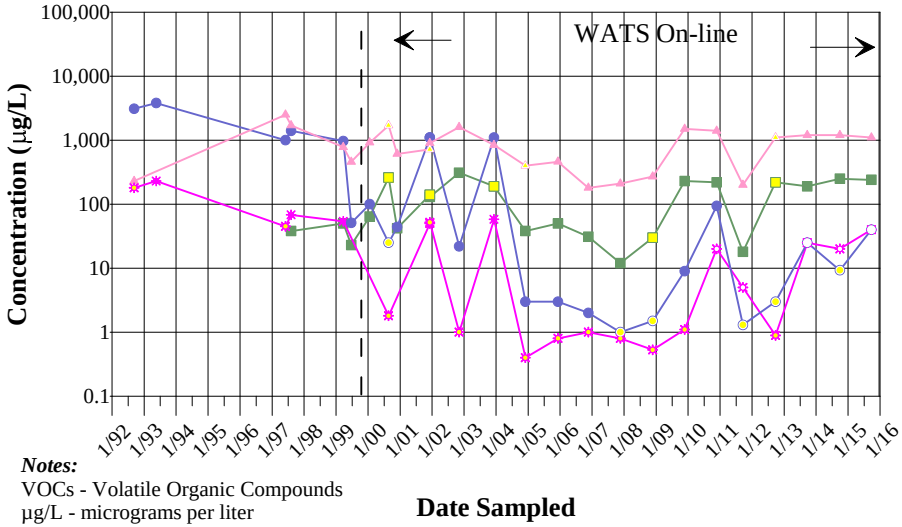
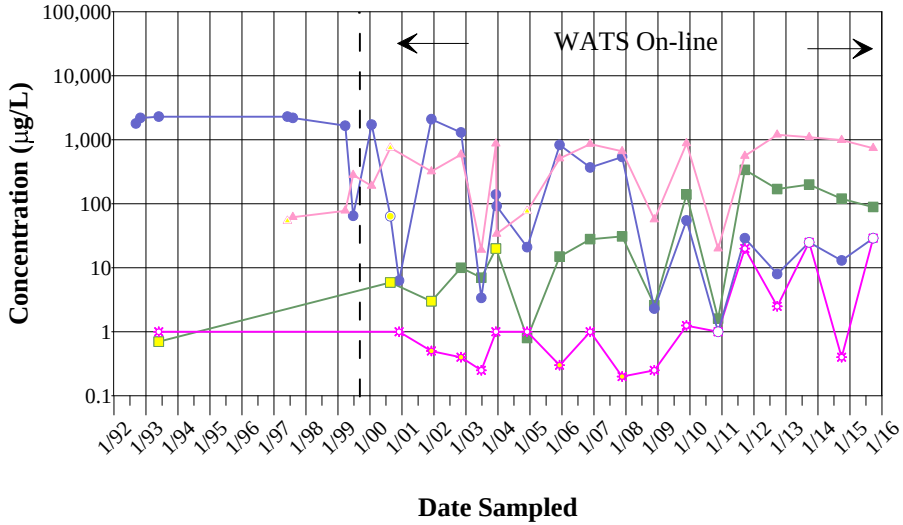


Figure 2-108 W9-34 (Lower Portion of the A Aquifer)



Notes:
VOCs - Volatile Organic Compounds
µg/L - micrograms per liter
TCE - trichloroethene; cis-1,2-DCE - cis-1,2,-dichloroethene; PCE - tetrachloroethene; VC - vinyl chloride
Open symbols indicate non-detect values. Yellow symbols indicate estimated values. Closed-line colored symbols indicate concentrations detected.
Non-detects are plotted at the reporting limits.

FIGURES 2-109 THROUGH 2-112
TIME SERIES OF VOCs CONCENTRATION PLOTS
IR SITE 28

Figure 2-109 W29-7 (Lower Portion of the A Aquifer)

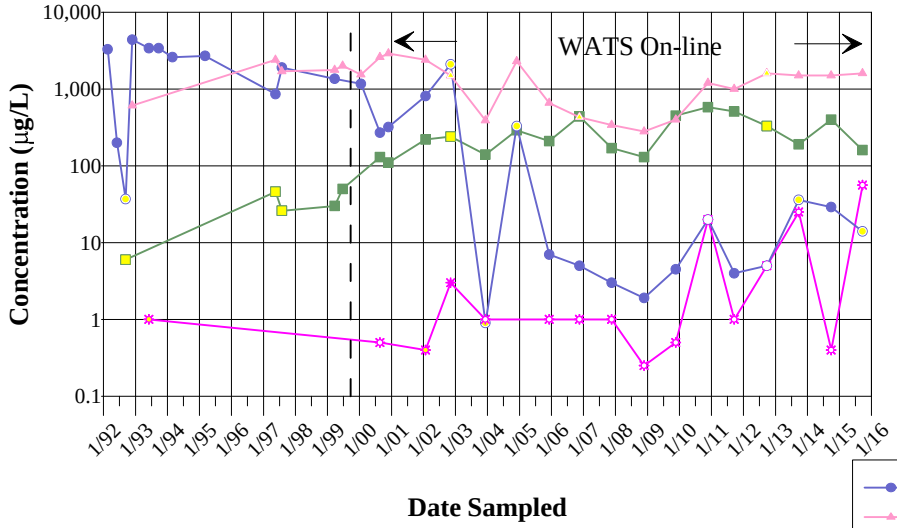
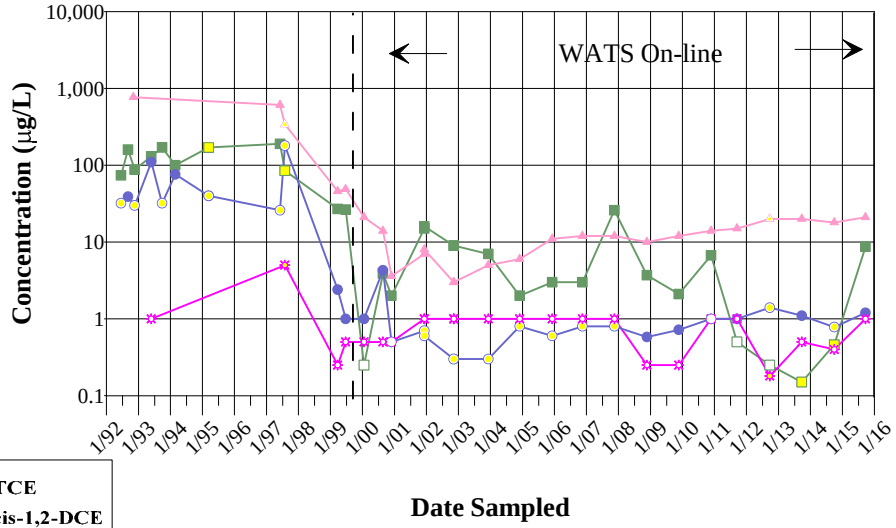


Figure 2-110 WU4-9 (Lower Portion of the A Aquifer)



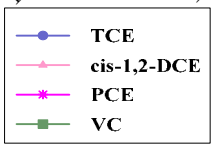


Figure 2-111 WU4-11 (Lower Portion of the A Aquifer)

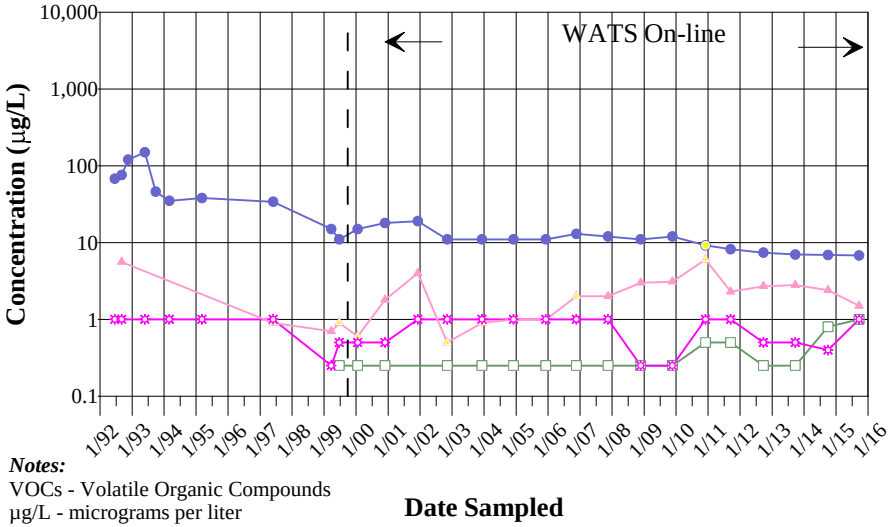
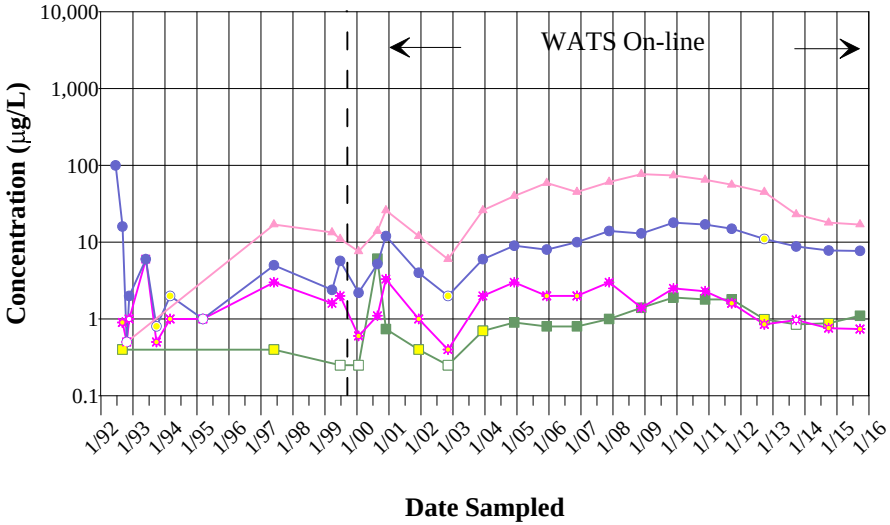
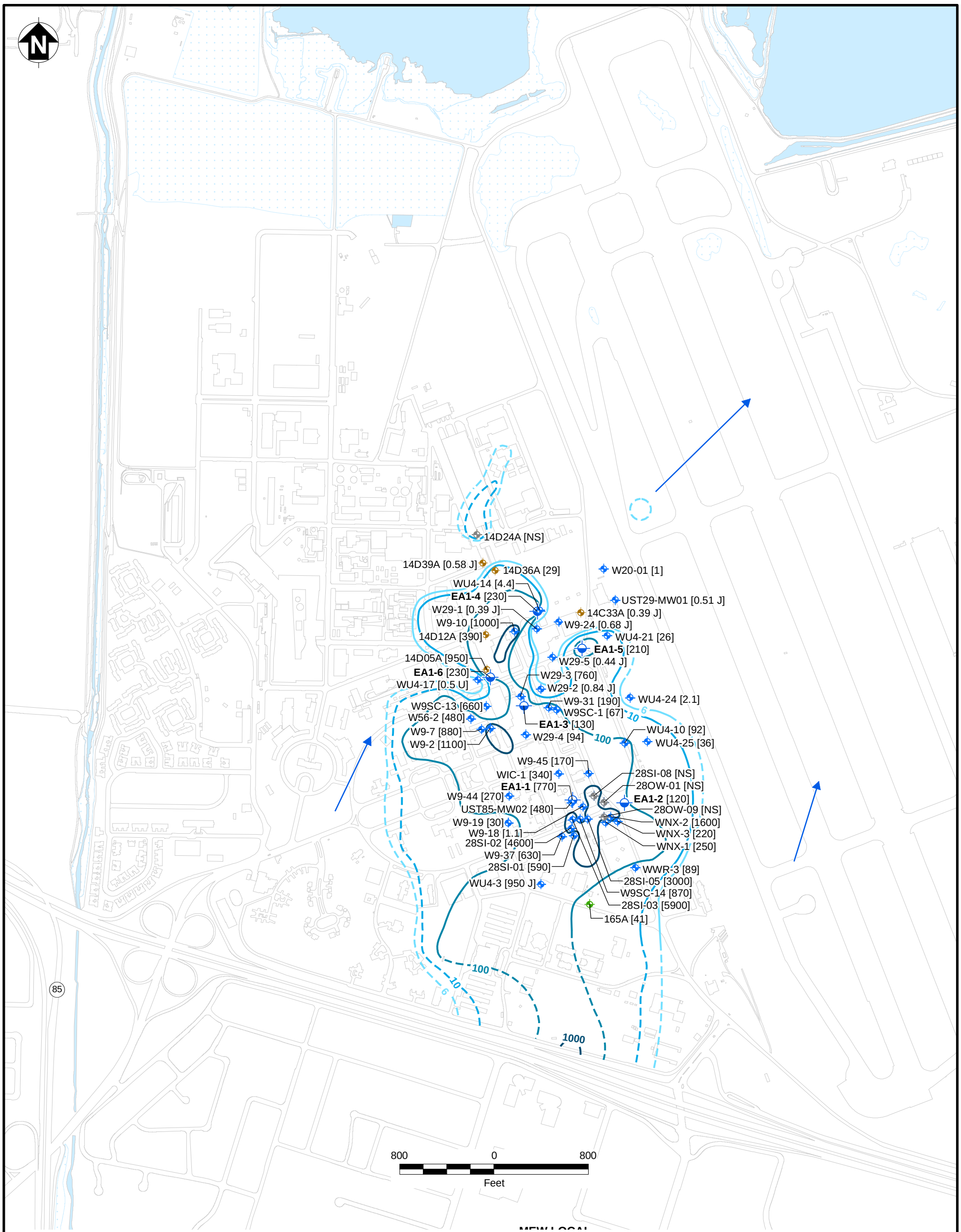


Figure 2-112 WU4-15 (Lower Portion of the A Aquifer)



Notes:
VOCs - Volatile Organic Compounds
µg/L - micrograms per liter
TCE - trichloroethene; cis-1,2-DCE - cis-1,2,-dichloroethene; PCE - tetrachloroethene; VC - vinyl chloride
Open symbols indicate non-detect values. Yellow symbols indicate estimated values. Closed-line colored symbols indicate concentrations detected.
Non-detects are plotted at the reporting limits.



NAVY EXTRACTION WELL

NAVY MONITORING WELL

MEW MONITORING WELL

NASA MONITORING WELL

MONITORING WELL, NOT SAMPLED

cis-1,2-DCE ISOCONCENTRATION CONTOUR - 1,000 µg/L (DASHED WHERE INFERRED FROM 2014 DATA)

cis-1,2-DCE ISOCONCENTRATION CONTOUR - 100 µg/L (DASHED WHERE INFERRED FROM 2014 DATA)

cis-1,2-DCE ISOCONCENTRATION CONTOUR - 10 µg/L (DASHED WHERE INFERRED FROM 2014 DATA)

cis-1,2-DCE ISOCONCENTRATION CONTOUR - 6 µg/L (DASHED WHERE INFERRED FROM 2014 DATA)

GROUNDWATER FLOW DIRECTION

ROAD

FACILITY INFRASTRUCTURE

WATER

WETLAND

Notes:

1. Samples collected Sept - Oct 2015
2. Due to possible dilution issues, groundwater analytical data collected from active extraction wells were not used as part of the plume contouring
3. cis-1,2-DCE concentrations shown in µg/L

µg/L- Micrograms per Liter
IR - Installation Restoration
J - Estimated Value
MEW - Middlefield-Ellis-Whisman
NAS - Naval Air Station
NS - Not Sampled
NASA - National Aeronautics and Space Administration
U - Not Detected

SES-TECH

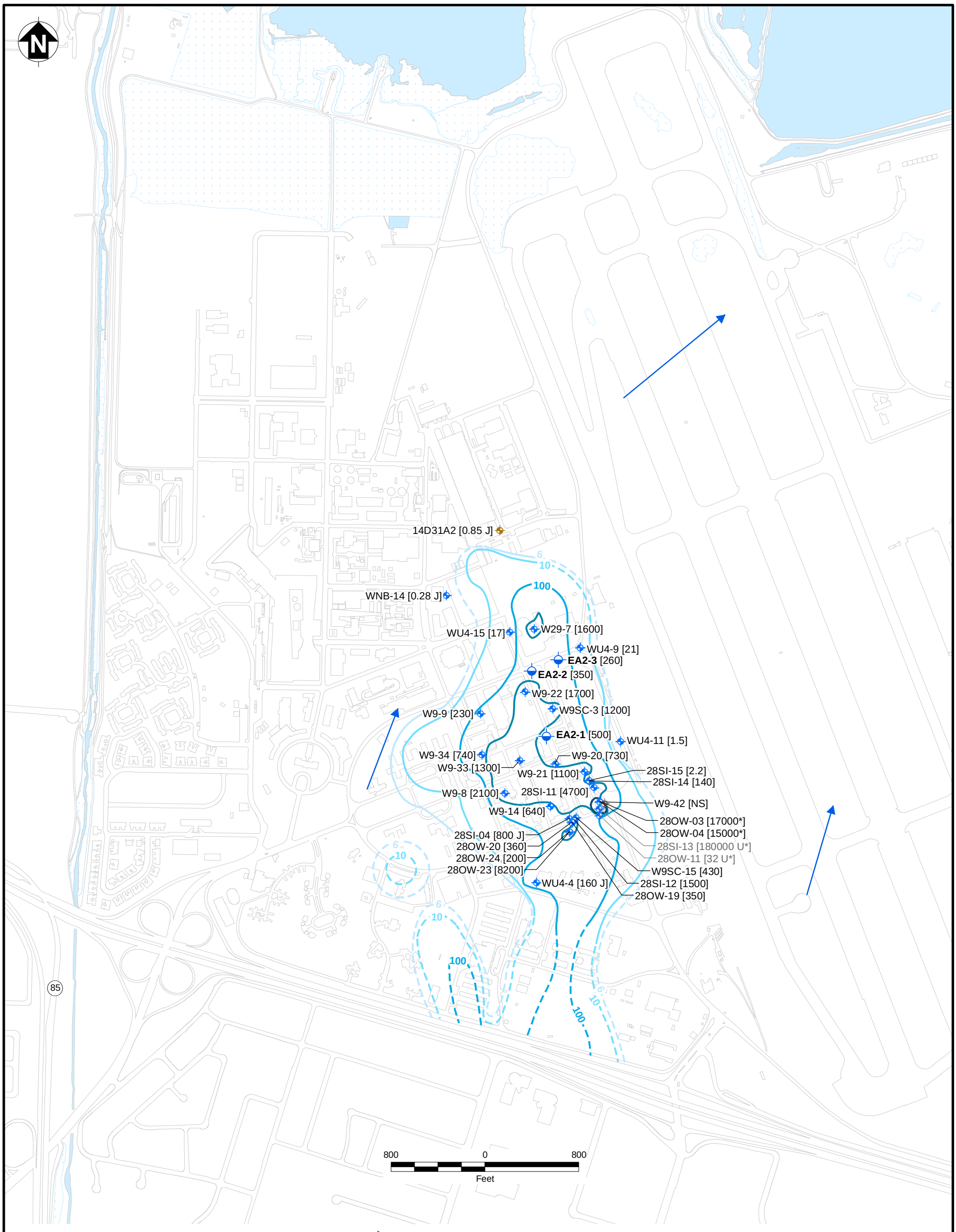
BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

2015 ANNUAL GROUNDWATER REPORT
FOR IR SITES 26 & 28

FIGURE 2-113

Cis-1,2-DICHLOROETHENE (cis-1,2-DCE) DISTRIBUTION, IR SITE 28, UPPER PORTION OF THE A AQUIFER - SEPTEMBER 2015

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA



NAVY EXTRACTION WELL

NAVY MONITORING WELL

NASA MONITORING WELL

MONITORING WELL, NOT SAMPLED

cis-1,2-DCE ISOCONCENTRATION CONTOUR - 10,000 µg/L

cis-1,2-DCE ISOCONCENTRATION CONTOUR - 1,000 µg/L

cis-1,2-DCE ISOCONCENTRATION CONTOUR - 100 µg/L (DASHED WHERE INFERRED FROM 2014 DATA)

cis-1,2-DCE ISOCONCENTRATION CONTOUR - 10 µg/L (DASHED WHERE INFERRED FROM 2014 DATA)

cis-1,2-DCE ISOCONCENTRATION CONTOUR - 5 µg/L (DASHED WHERE INFERRED FROM 2014 DATA)

GROUNDWATER FLOW DIRECTION

ROAD

FACILITY INFRASTRUCTURE

WATER

WETLAND

Notes:
1. Samples collected Sept - Oct 2015
2. * These wells sampled by CB&I, Traffic Island Treatability Study, Sept 2015
2. Due to possible dilution issues, groundwater analytical data collected from active extraction wells were not used as part of the plume contouring
3. cis-1,2-DCE concentrations shown in µg/L

µg/L- Micrograms per Liter
IR - Installation Restoration
J - Estimated Value
MEW - Middlefield-Ellis-Whisman
NAS - Naval Air Station
NS - Not Sampled
NASA - National Aeronautics and Space Administration
U - Not Detected

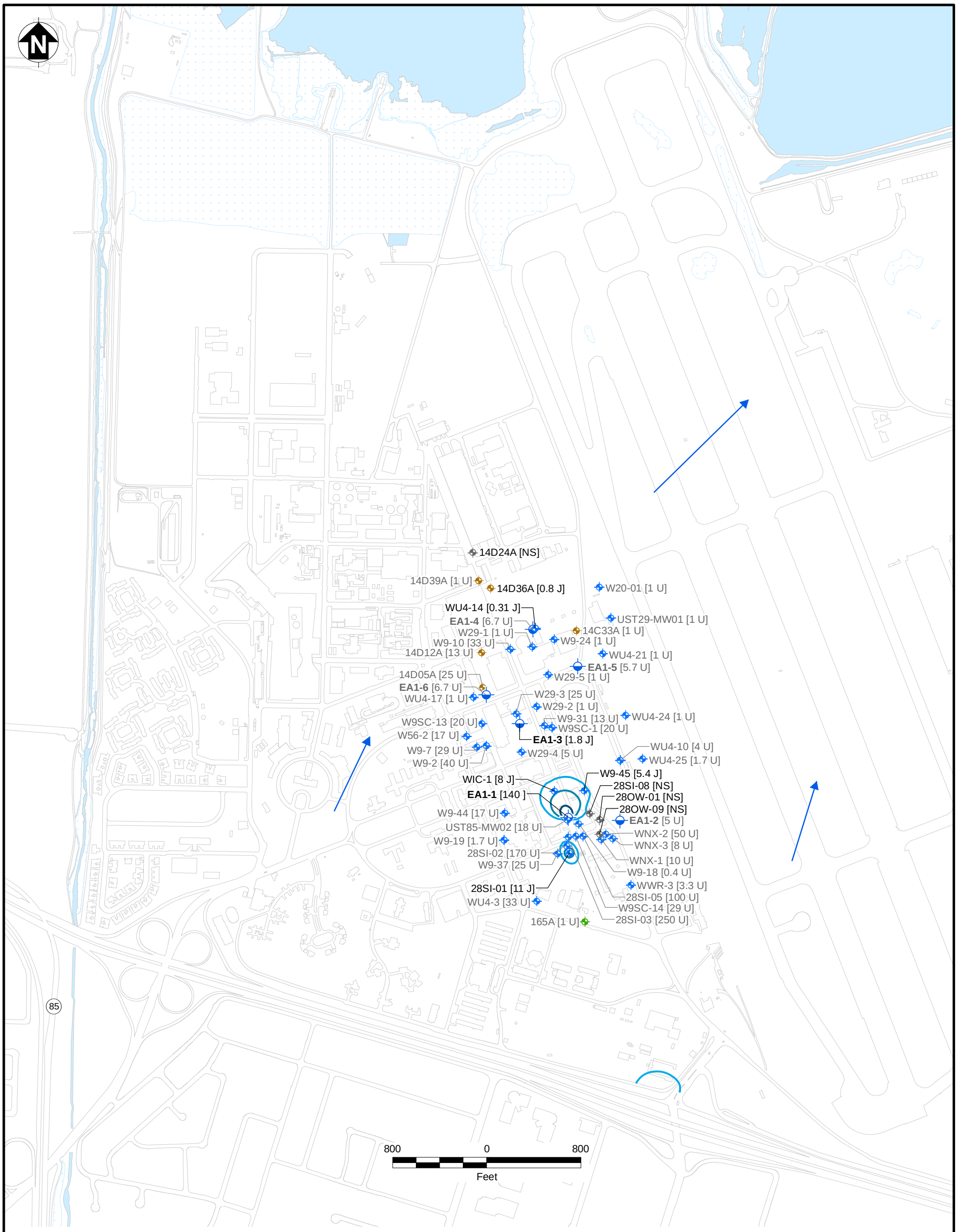
SES-TECH

BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

2015 ANNUAL GROUNDWATER REPORT
FOR IR SITES 26 & 28

FIGURE 2-114
Cis-1,2-DICHLOROETHENE (cis-1,2-DCE) DISTRIBUTION, IR SITE 28, LOWER PORTION OF THE A AQUIFER - SEPTEMBER 2015

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA



NAVY EXTRACTION WELL

NAVY MONITORING WELL

MEW MONITORING WELL

NASA MONITORING WELL

MONITORING WELL, NOT SAMPLED

PCE ISOCONCENTRATION CONTOUR - 100 µg/L

PCE ISOCONCENTRATION CONTOUR - 10 µg/L

PCE ISOCONCENTRATION CONTOUR - 5 µg/L

GROUNDWATER FLOW DIRECTION

ROAD

FACILITY INFRASTRUCTURE

WATER

WETLAND

Notes:

1. Samples collected Sept - Oct 2015
2. Due to possible dilution issues, groundwater analytical data collected from active extraction wells were not used as part of the plume contouring
3. PCE concentrations shown in µg/L

µg/L- Micrograms per Liter
IR - Installation Restoration
J - Estimated Value
MEW - Middlefield-Ellis-Whisman
NAS - Naval Air Station
NS - Not Sampled
NASA - National Aeronautics and Space Administration
U - Not Detected

SES-TECH

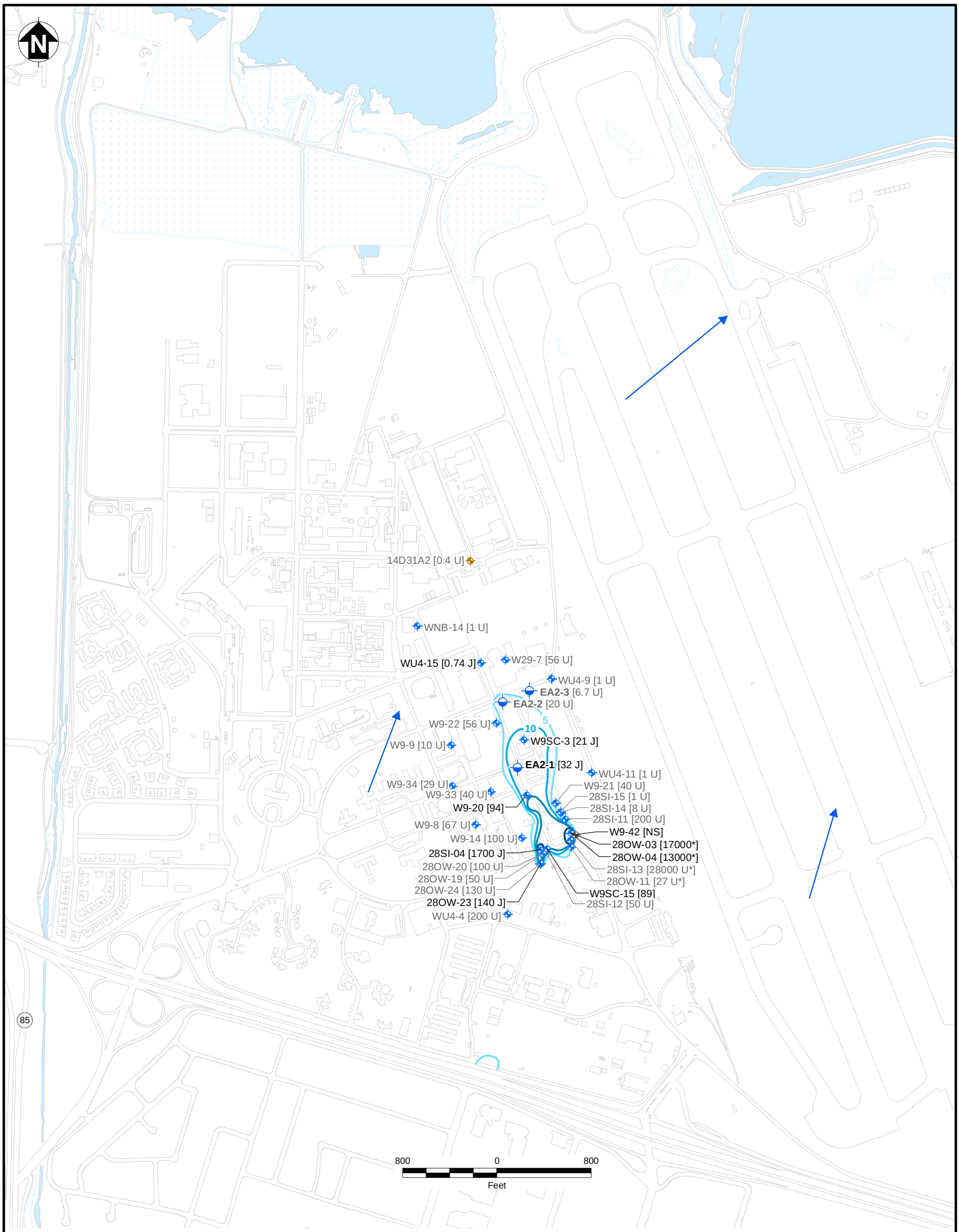
BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

2015 ANNUAL GROUNDWATER REPORT
FOR IR SITES 26 & 28

FIGURE 2-115

TETRACHLOROETHENE (PCE) DISTRIBUTION, IR SITE 28, UPPER PORTION OF THE A AQUIFER - SEPTEMBER 2015

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA



NAVY EXTRACTION WELL

NAVY MONITORING WELL

NASA MONITORING WELL

MONITORING WELL, NOT SAMPLED

PCE ISOCONCENTRATION CONTOUR - 1000 µg/L

PCE ISOCONCENTRATION CONTOUR - 100 µg/L

PCE ISOCONCENTRATION CONTOUR - 10 µg/L

PCE ISOCONCENTRATION CONTOUR - 5 µg/L

GROUNDWATER FLOW DIRECTION

ROAD

FACILITY INFRASTRUCTURE

WATER

WETLAND

Notes:

1. Samples collected Sept - Oct 2015
2. * These wells sampled by CB&I, Traffic Island Treatability Study, Sept 2015
2. Due to possible dilution issues, groundwater analytical data collected from active extraction wells were not used as part of the plume contouring
3. PCE concentrations shown in µg/L

µg/L- Micrograms per Liter
IR - Installation Restoration
J - Estimated Value
MEW - Middlefield-Ellis-Whisman
NAS - Naval Air Station
NS - Not Sampled
NASA - National Aeronautics and Space Administration
U - Not Detected

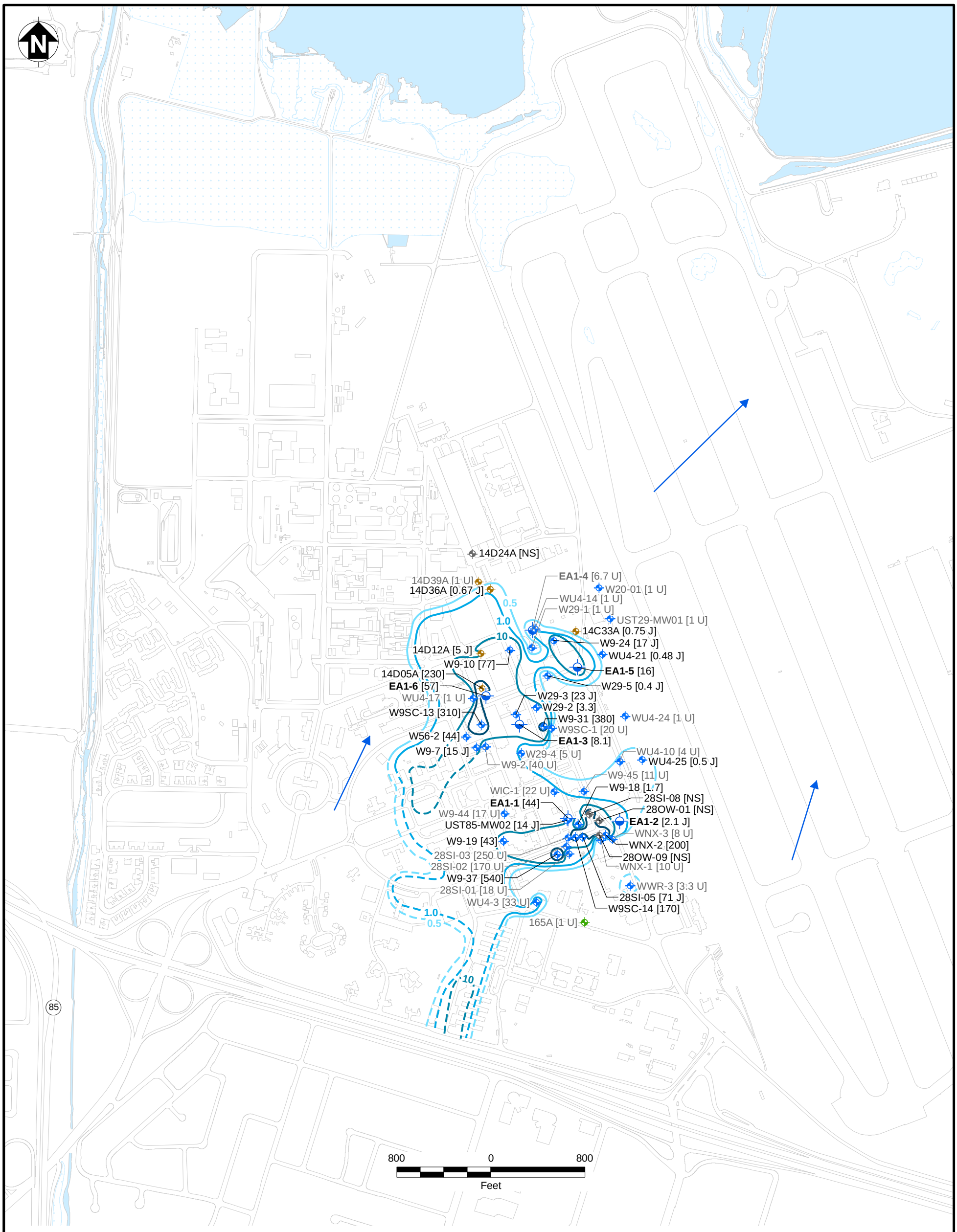
SES-TECH

BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

2015 ANNUAL GROUNDWATER REPORT
FOR IR SITES 26 & 28

FIGURE 2-116
TETRACHLOROETHENE (PCE) DISTRIBUTION, IR SITE 28, LOWER PORTION OF THE A AQUIFER - SEPTEMBER 2015

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA



NAVY EXTRACTION WELL

NAVY MONITORING WELL

MEW MONITORING WELL

NASA MONITORING WELL

MONITORING WELL, NOT SAMPLED

VC ISOCONCENTRATION CONTOUR - 100 µg/L (DASHED WHERE INFERRED FROM 2014 DATA)

VC ISOCONCENTRATION CONTOUR - 10 µg/L (DASHED WHERE INFERRED FROM 2014 DATA)

VC ISOCONCENTRATION CONTOUR - 1.0 µg/L (DASHED WHERE INFERRED FROM 2014 DATA)

VC ISOCONCENTRATION CONTOUR - 0.5 µg/L (DASHED WHERE INFERRED FROM 2014 DATA)

GROUNDWATER FLOW DIRECTION

ROAD

FACILITY INFRASTRUCTURE

WATER

WETLAND

Notes:

1. Samples collected Sept - Oct 2015
2. Due to possible dilution issues, groundwater analytical data collected from active extraction wells were not used as part of the plume contouring
3. VC concentrations shown in µg/L

µg/L- Micrograms per Liter
IR - Installation Restoration
J - Estimated Value
MEW - Middlefield-Ellis-Whisman
NAS - Naval Air Station
NS - Not Sampled
NASA - National Aeronautics and Space Administration
U - Not Detected

SES-TECH

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SAN DIEGO, CALIFORNIA

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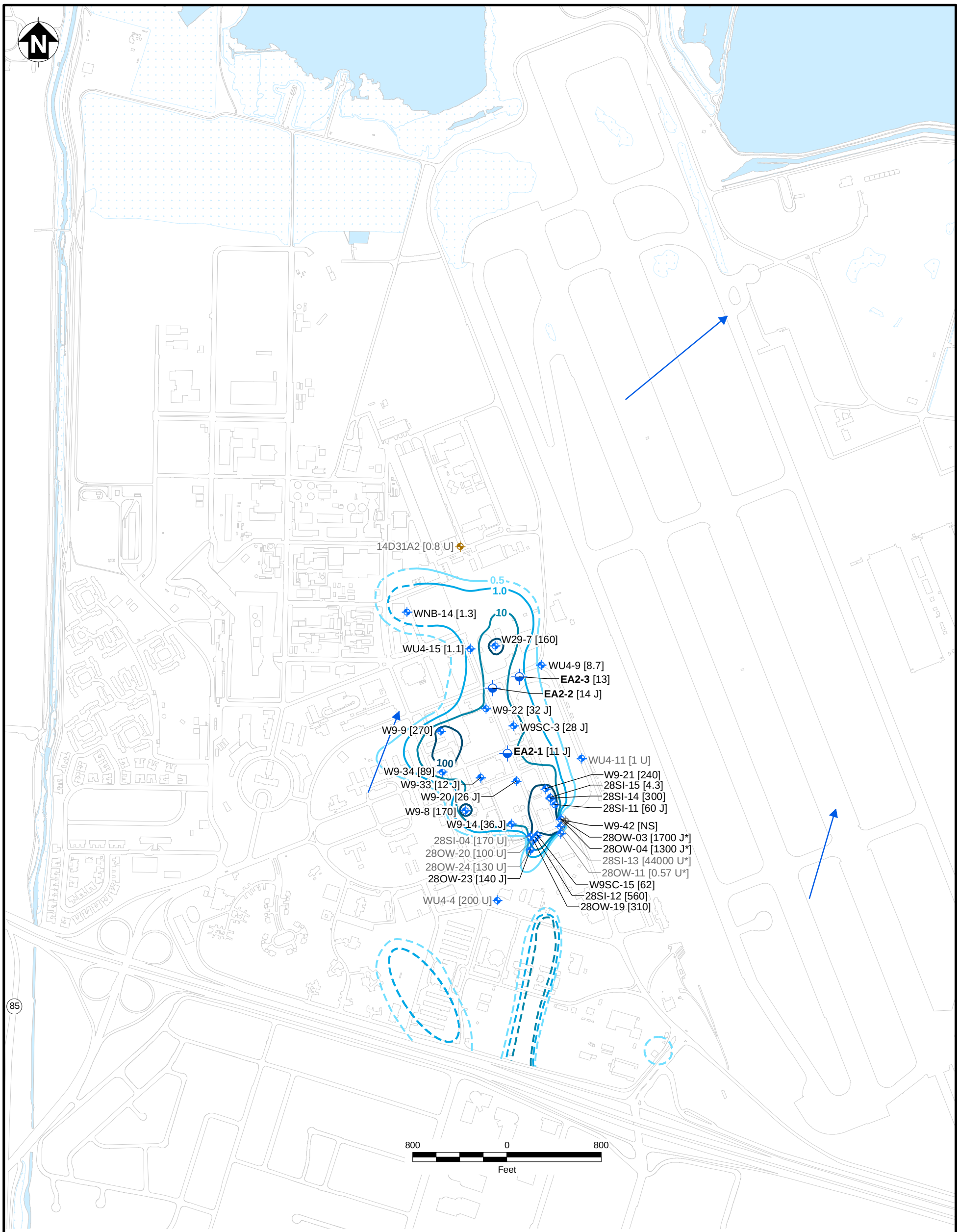
FOR IR SITES 26 & 28

FIGURE 2-117
VINYL CHLORIDE (VC) DISTRIBUTION,
IR SITE 28,
UPPER PORTION OF THE A AQUIFER -
SEPTEMBER 2015

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA



NAVY EXTRACTION WELL

NAVY MONITORING WELL

NASA MONITORING WELL

MONITORING WELL, NOT SAMPLED

VC ISOCONCENTRATION CONTOUR - 100 µg/L

VC ISOCONCENTRATION CONTOUR - 10 µg/L (DASHED WHERE INFERRED FROM 2014 DATA)

VC ISOCONCENTRATION CONTOUR - 1.0 µg/L (DASHED WHERE INFERRED FROM 2014 DATA)

VC ISOCONCENTRATION CONTOUR - 0.5 µg/L (DASHED WHERE INFERRED FROM 2014 DATA)

GROUNDWATER FLOW DIRECTION

ROAD

FACILITY INFRASTRUCTURE

WATER

WETLAND

Notes:

1. Samples collected Sept - Oct 2015
2. * These wells sampled by CB&I, Traffic Island Treatability Study, Sept 2015
2. Due to possible dilution issues, groundwater analytical data collected from active extraction wells were not used as part of the plume contouring
3. VC concentrations shown in µg/L

µg/L- Micrograms per Liter
IR - Installation Restoration
J - Estimated Value
MEW - Middlefield-Ellis-Whisman
NAS - Naval Air Station
NS - Not Sampled
NASA - National Aeronautics and Space Administration
U - Not Detected

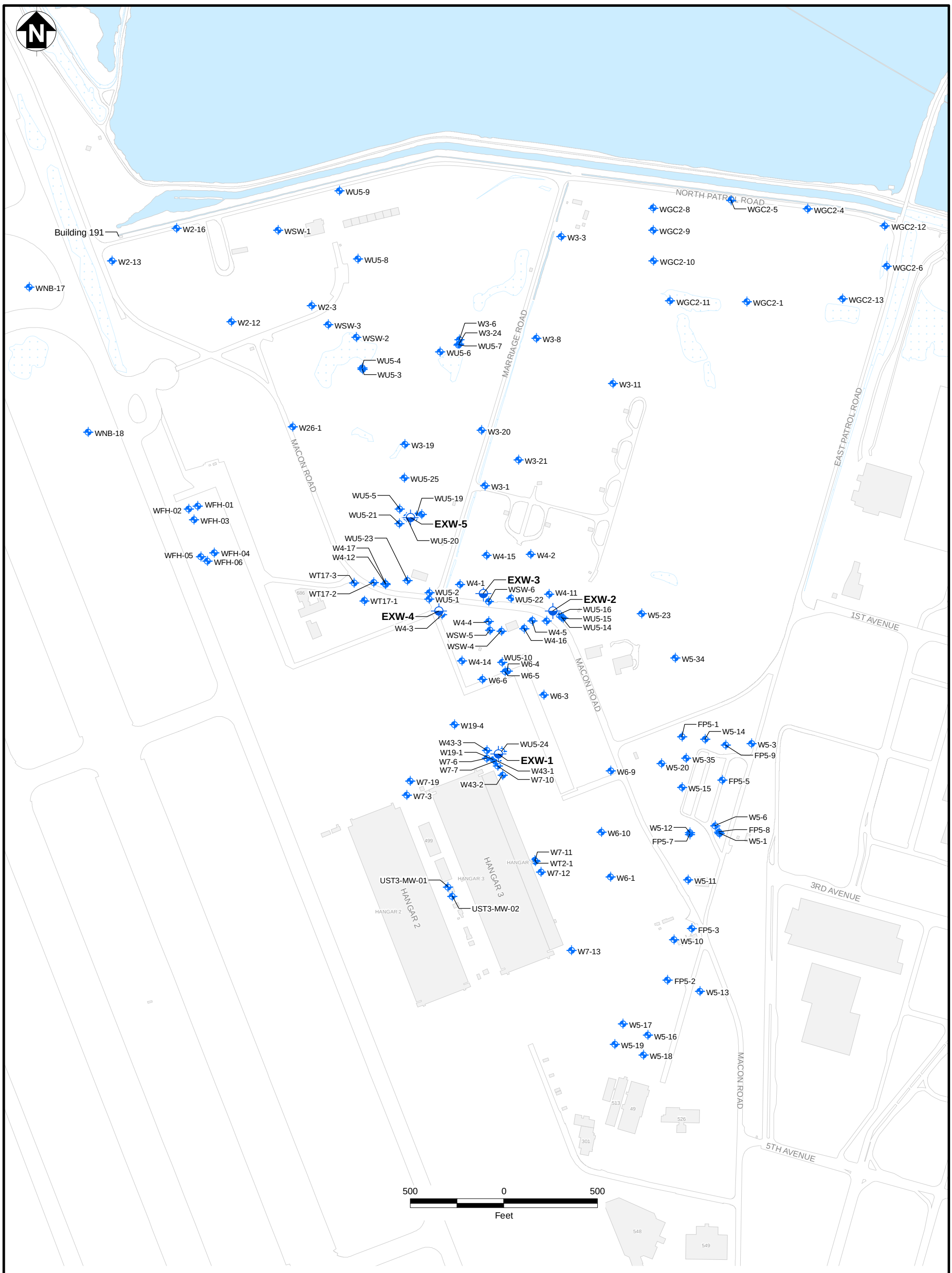
SES-TECH

BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

2015 ANNUAL GROUNDWATER REPORT
FOR IR SITES 26 & 28

FIGURE 2-118
VINYL CHLORIDE (VC) DISTRIBUTION,
IR SITE 28,
LOWER PORTION OF THE A AQUIFER -
SEPTEMBER 2015

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA



NAVY EXTRACTION WELL

NAVY MONITORING WELL

ROAD

FACILITY INFRASTRUCTURE

WATER

WETLAND

Notes:

IR - Installation Restoration
NAS - Naval Air Station

SES-TECH

BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

2015 ANNUAL GROUNDWATER REPORT
FOR IR SITES 26 & 28

FIGURE 3-1
MONITORING AND EXTRACTION WELL LOCATION MAP, IR SITE 26, UPPER PORTION OF THE A AQUIFER

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA

FIGURES 3- 2 THROUGH 3- 5
HYDROGRAPHS
IR SITE 26

Figure 3-2 W4-3 (Upper Portion of the A Aquifer)

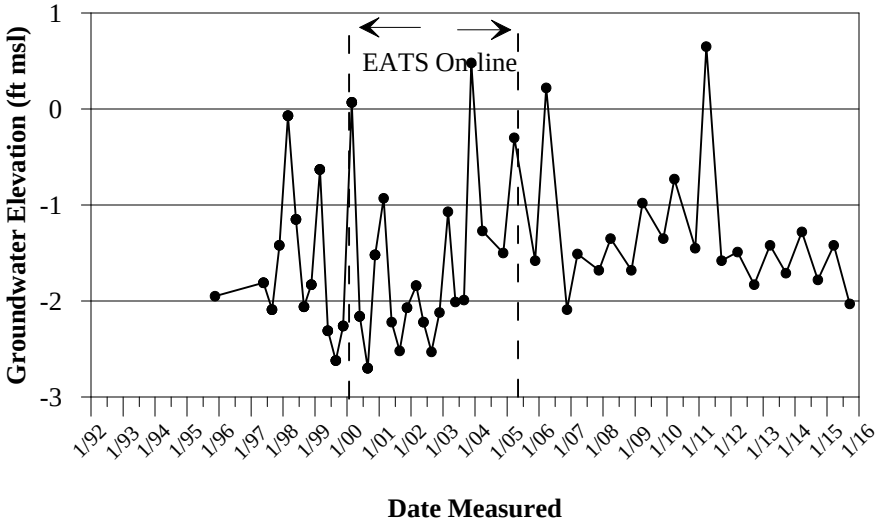


Figure 3-3 W7-10 (Upper Portion of the A Aquifer)

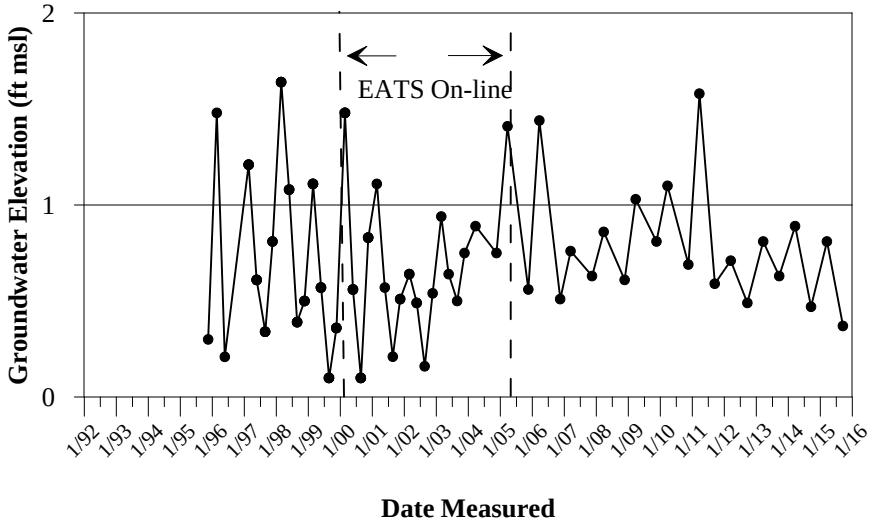


Figure 3-4 WSW-6 (Upper Portion of the A Aquifer)

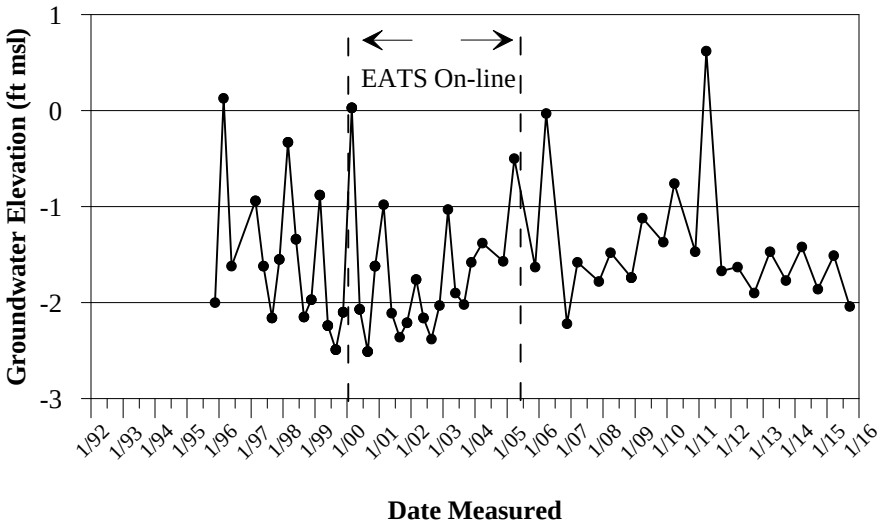
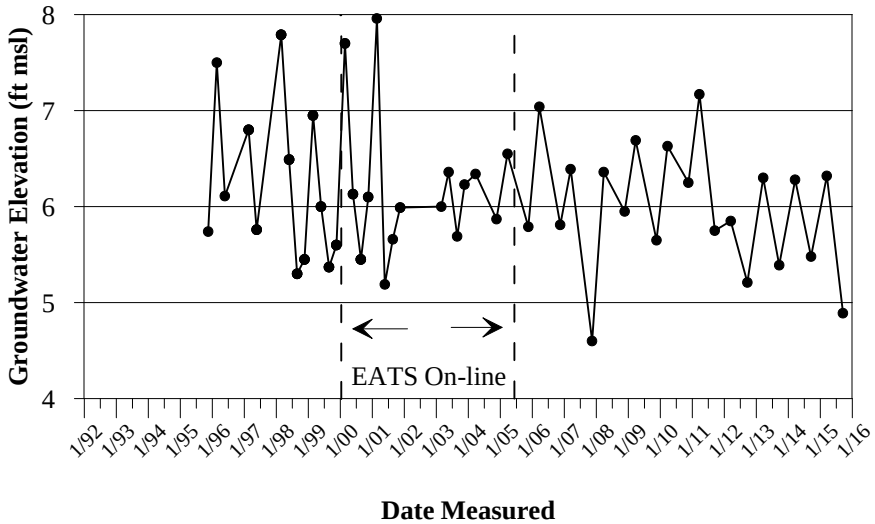


Figure 3-5 W5-18 (Upper Portion of the A Aquifer)



Notes:
ft msl - feet mean sea level

FIGURES 3- 6 THROUGH 3- 9
HYDROGRAPHS
IR SITE 26

Figure 3-6 W5-23 (Upper Portion of the A Aquifer)

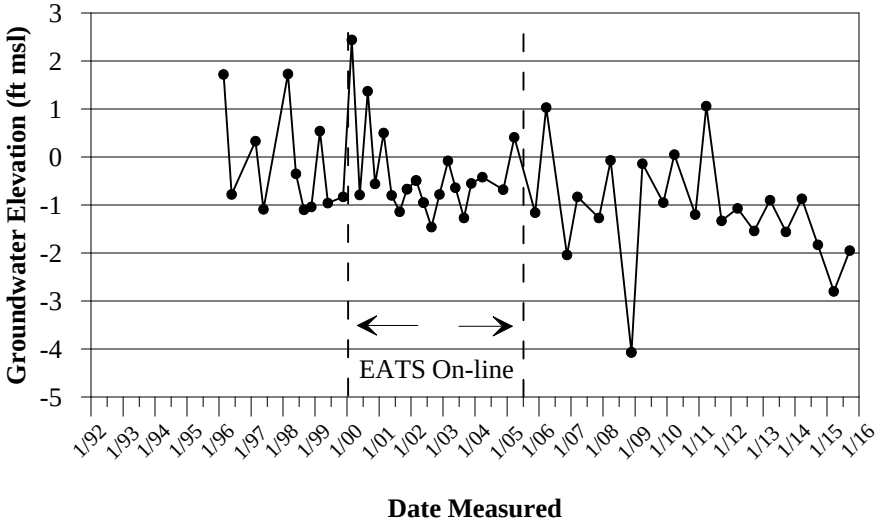


Figure 3-7 W10-2 (Upper Portion of the A Aquifer)

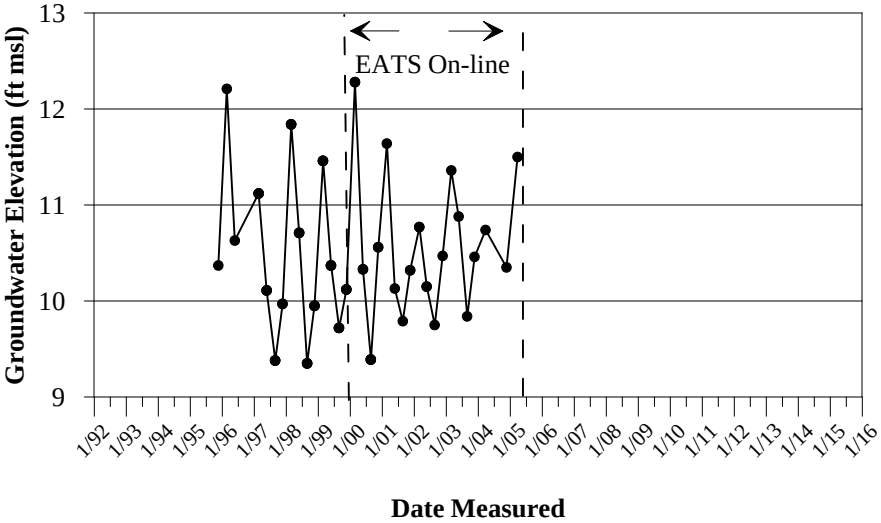


Figure 3-8 W19-4 (Upper Portion of the A Aquifer)

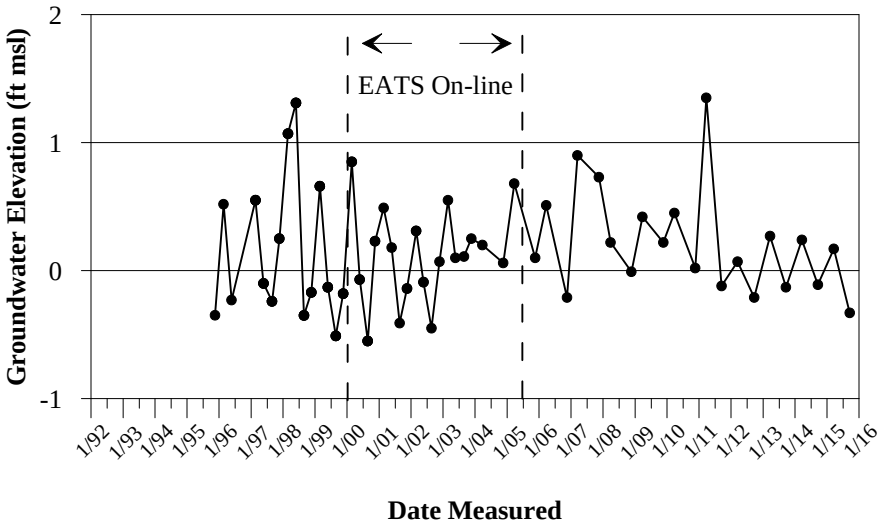
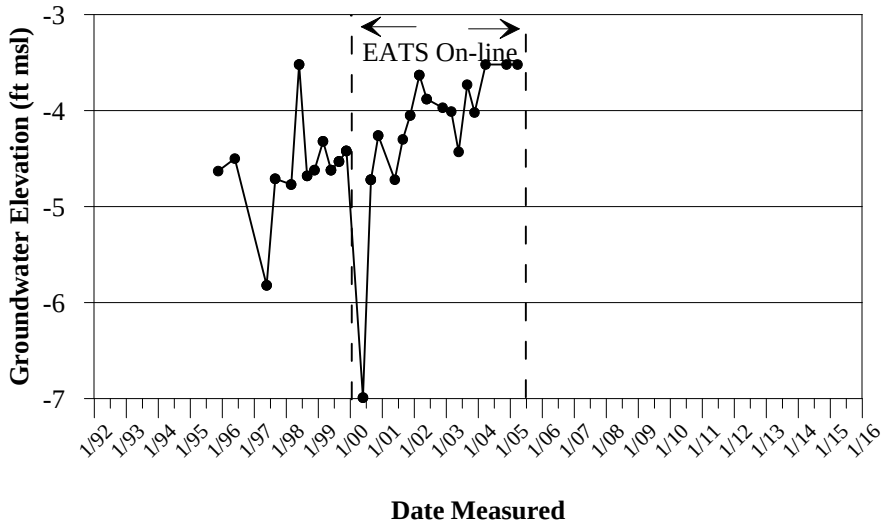


Figure 3-9 W3-12 (Lower Portion of the A Aquifer)



Notes:
ft msl - feet mean sea level

FIGURES 3-10 THROUGH 3-13
HYDROGRAPHS
IR SITE 26

Figure 3-10 W3-13 (Lower Portion of the A Aquifer)

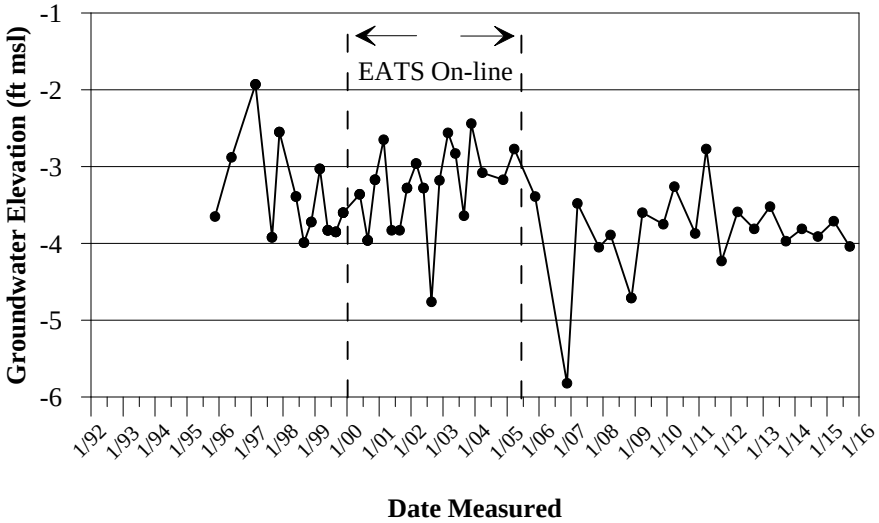


Figure 3-11 W5-7 (Lower Portion of the A Aquifer)

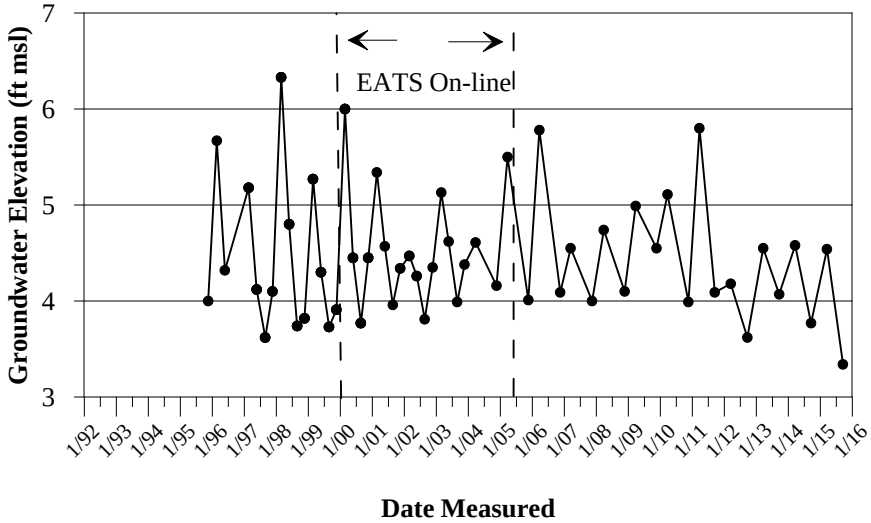


Figure 3-12 W5-8 (Lower Portion of the A Aquifer)

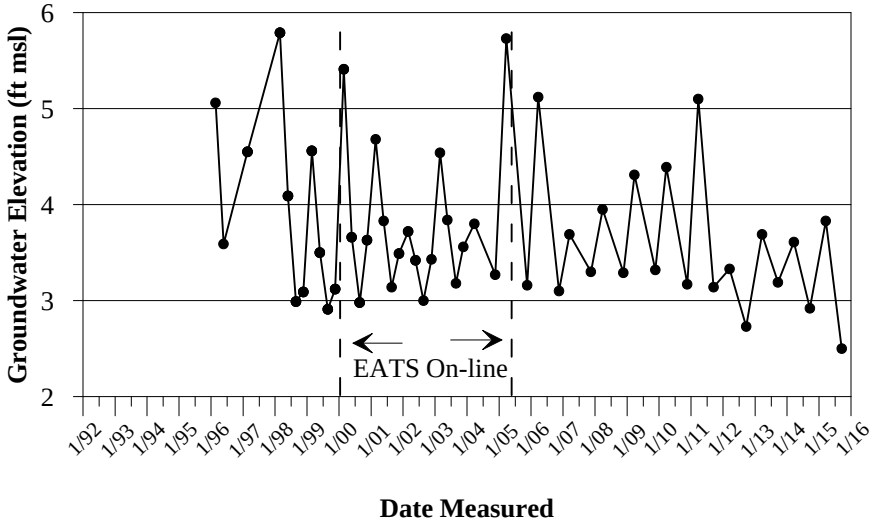
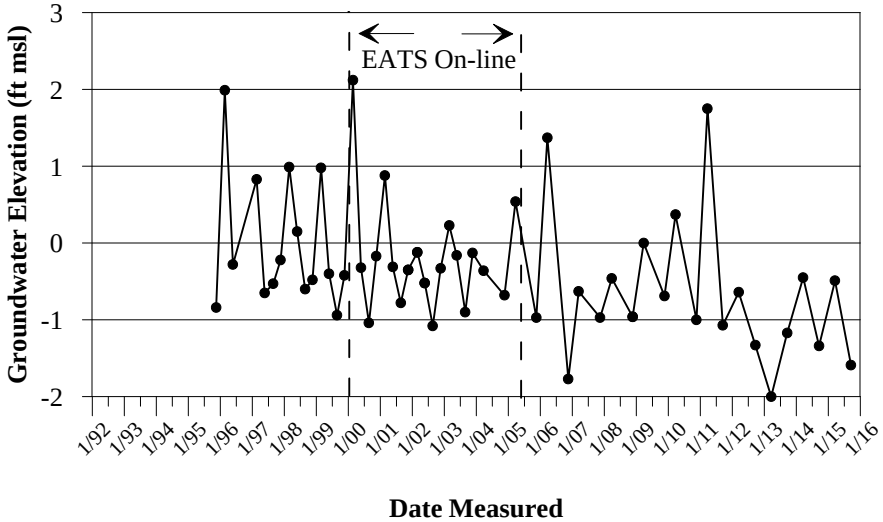


Figure 3-13 W5-25 (Lower Portion of the A Aquifer)



Notes:
ft msl - feet mean sea level

FIGURES 3-14 THROUGH 3-17
HYDROGRAPHS
IR SITE 26

Figure 3-14 W19-2 (Lower Portion of the A Aquifer)

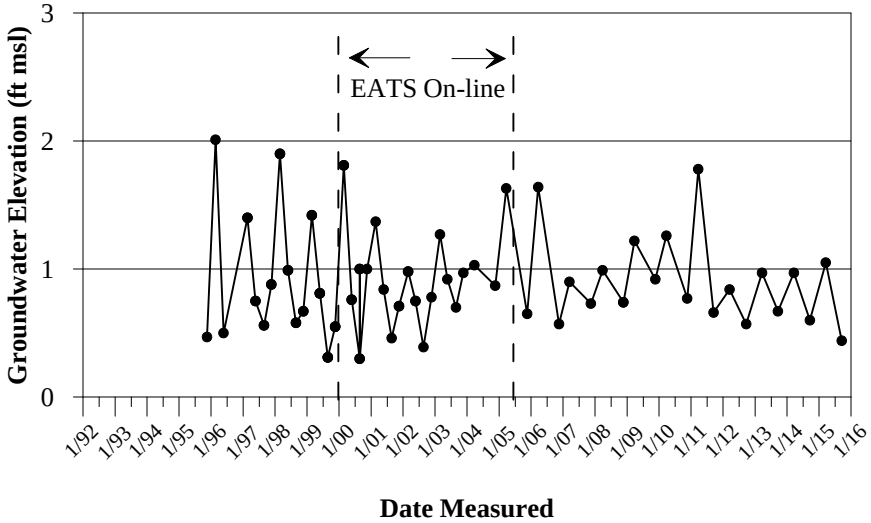


Figure 3-15 W19-3 (Lower Portion of the A Aquifer)

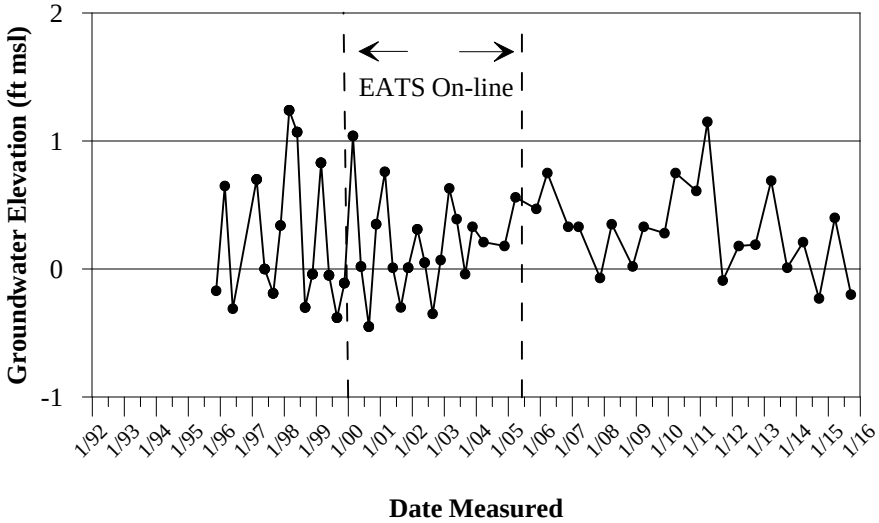


Figure 3-16 W4-13 (B2 Aquifer)

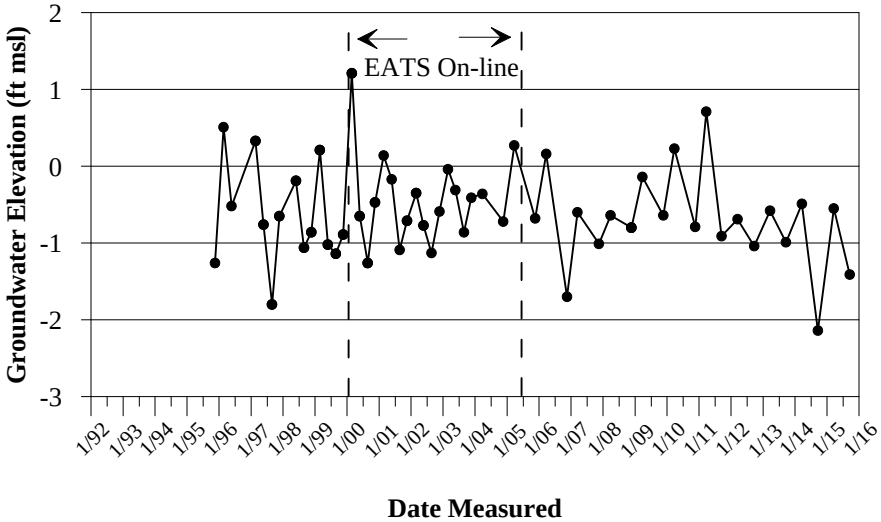
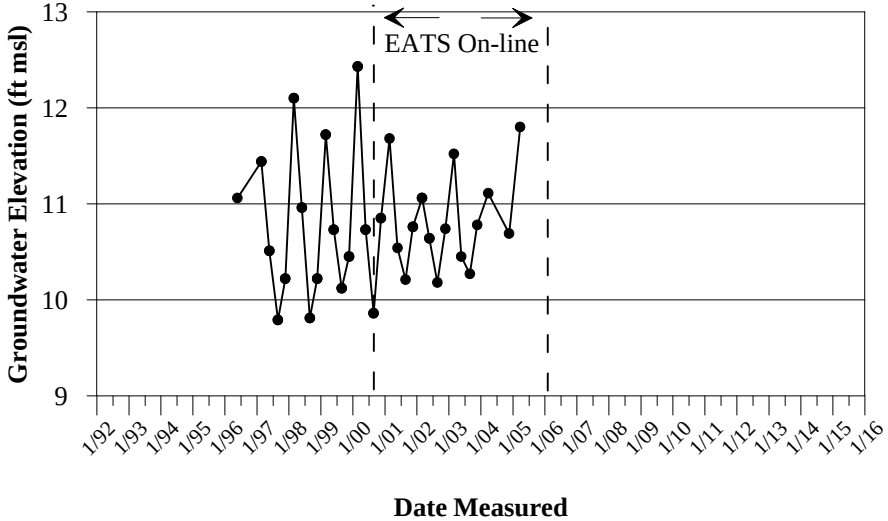
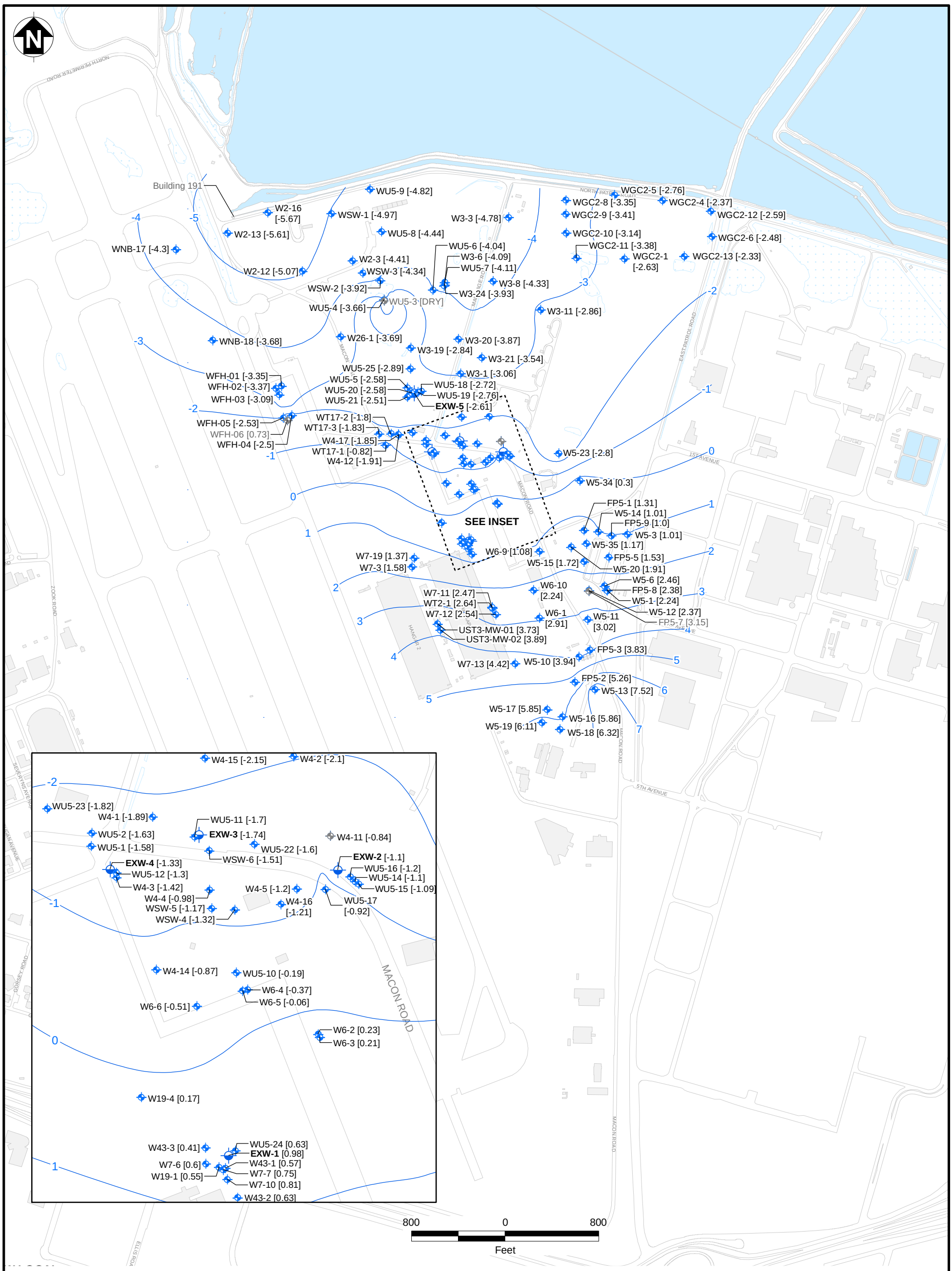


Figure 3-17 W10-3 (B2 Aquifer)



Notes:
ft msl - feet mean sea level



NAVY EXTRACTION WELL

NAVY MONITORING WELL

NAVY MONITORING WELL (NOT USED IN GW MODELLING)

(5.5) GROUNDWATER ELEVATION

20 GROUNDWATER CONTOUR (DASHED WHERE INFERRED)

GROUNDWATER FLOW DIRECTION

ROAD

FACILITY INFRASTRUCTURE

WATER

WETLAND

Notes:

1. Groundwater level measured on March 19, 2015
2. Groundwater elevation shown in feet amsl

AMSL - Above Mean Sea Level
DRY - Dry Well
IR - Installation Restoration
NM - Not Measured

SESTECH

BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

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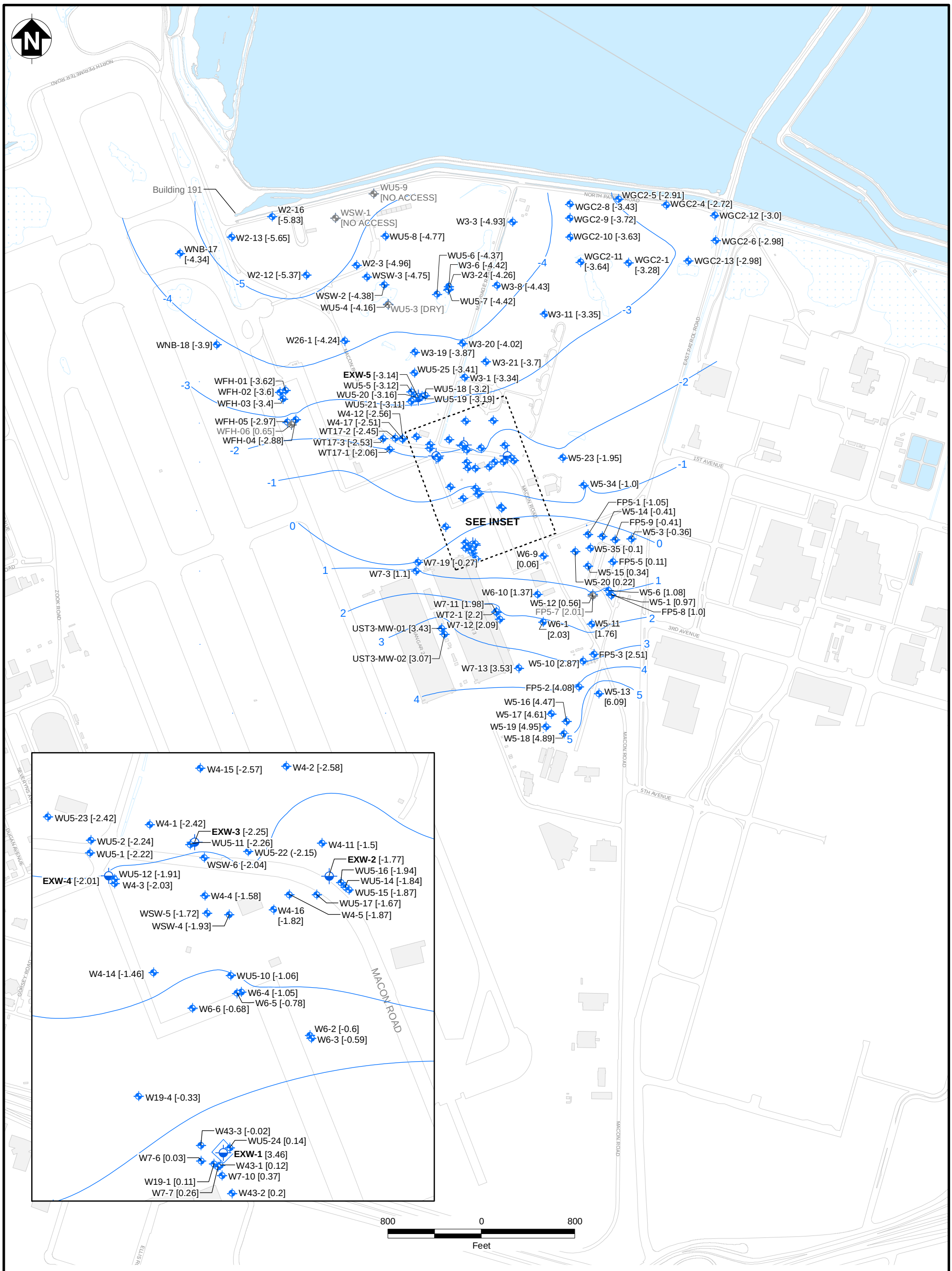
FIGURE 3-18

POTENTIOMETRIC SURFACE MAP, IR SITE 26, UPPER PORTION OF THE A AQUIFER - MARCH 19, 2015

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA



NAVY EXTRACTION WELL

NAVY MONITORING WELL

NAVY MONITORING WELL, NOT USED FOR GROUNDWATER ELEVATION CONTOURING

(5.5) GROUNDWATER ELEVATION

—20— GROUNDWATER CONTOUR (DASHED WHERE INFERRED)

GROUNDWATER FLOW DIRECTION

ROAD

FACILITY INFRASTRUCTURE

WATER

WETLAND

Notes:

1. Groundwater level measured on September 17, 2015
2. Groundwater elevation shown in feet amsl

AMSL - Above Mean Sea Level
DRY - Dry Well
IR - Installation Restoration
NM - Not Measured

SESTECH

BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

2015 ANNUAL GROUNDWATER REPORT
FOR IR SITES 26 & 28

FIGURE 3-19

POTENTIOMETRIC SURFACE MAP, IR SITE 26, UPPER PORTION OF THE A AQUIFER - SEPTEMBER 17, 2015

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA

FIGURES 3-20 THROUGH 3-23
TIME SERIES OF VOCs CONCENTRATION PLOTS
IR SITE 26

Figure 3-20 W4-3 (Upper Portion of the A Aquifer)

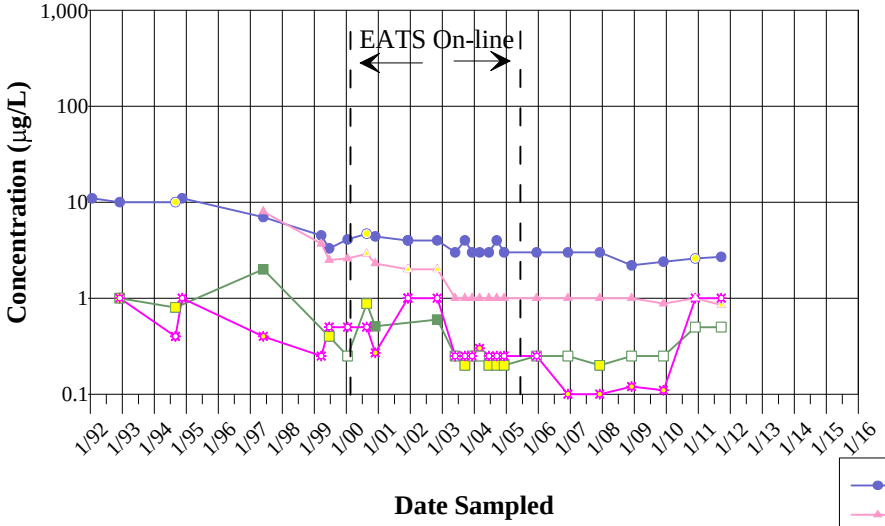
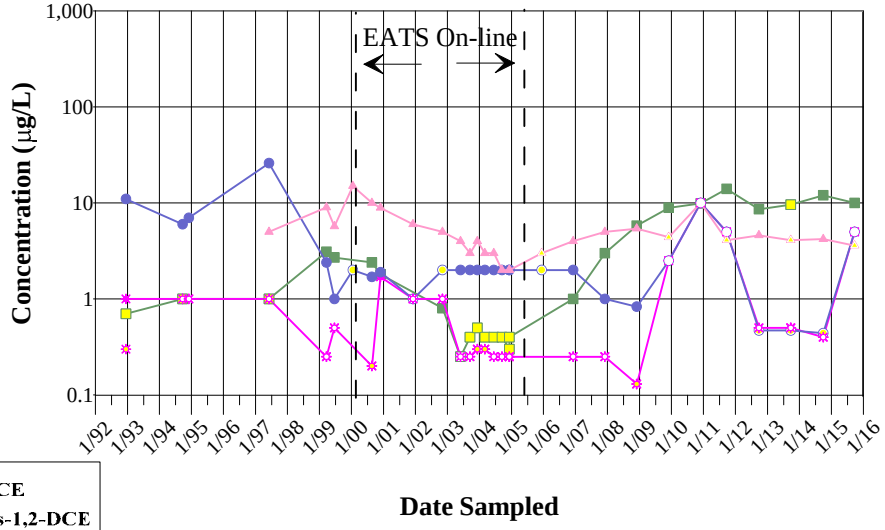


Figure 3-21 W4-14 (Upper Portion of the A Aquifer)



TCE
cis-1,2-DCE
PCE
VC

Figure 3-22 W4-15 (Upper Portion of the A Aquifer)

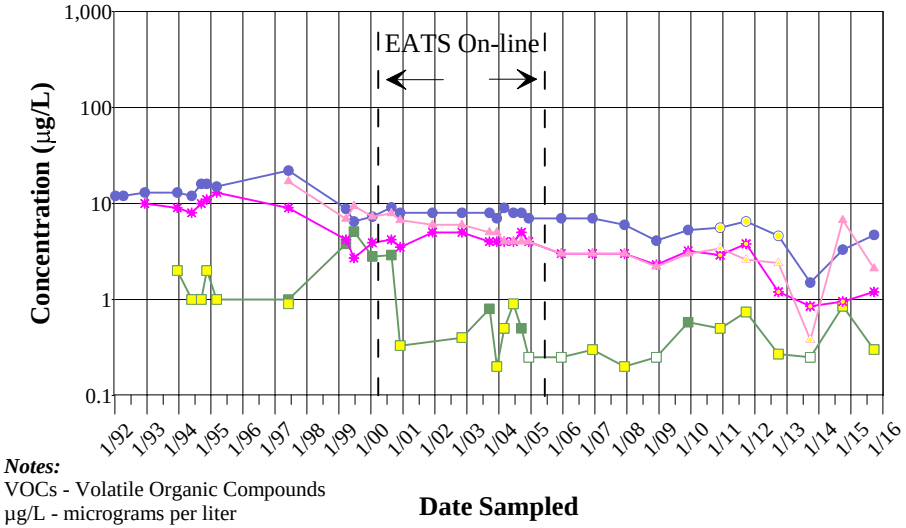
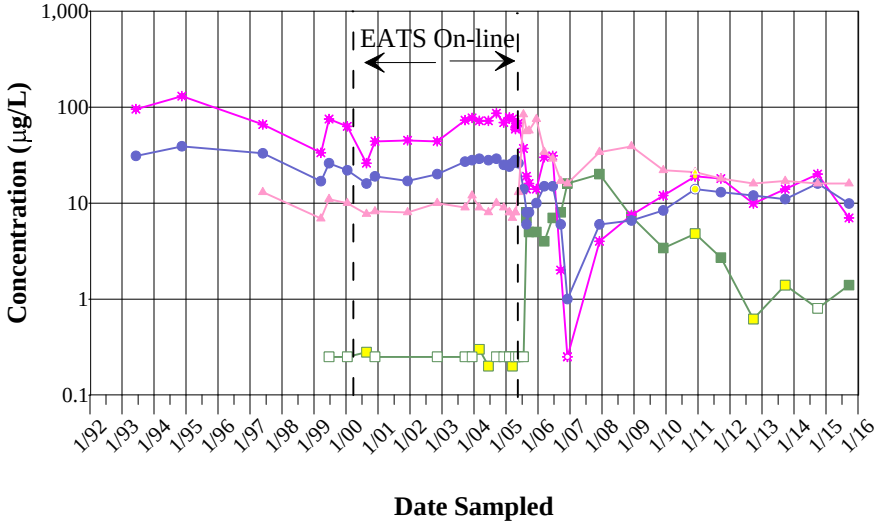


Figure 3-23 W7-10 (Upper Portion of the A Aquifer)



Notes:
VOCs - Volatile Organic Compounds
µg/L - micrograms per liter
TCE - trichloroethene; cis-1,2-DCE - cis-1,2,-dichloroethene; PCE - tetrachloroethene; VC - vinyl chloride
Open symbols indicate non-detect values. Yellow symbols indicate estimated values. Closed-line colored symbols indicate concentrations detected.
Non-detects are plotted at the reporting limits.

FIGURES 3-24 THROUGH 3-27
TIME SERIES OF VOCs CONCENTRATION PLOTS
IR SITE 26

Figure 3-24 WSW-6 (Upper Portion of the A Aquifer)

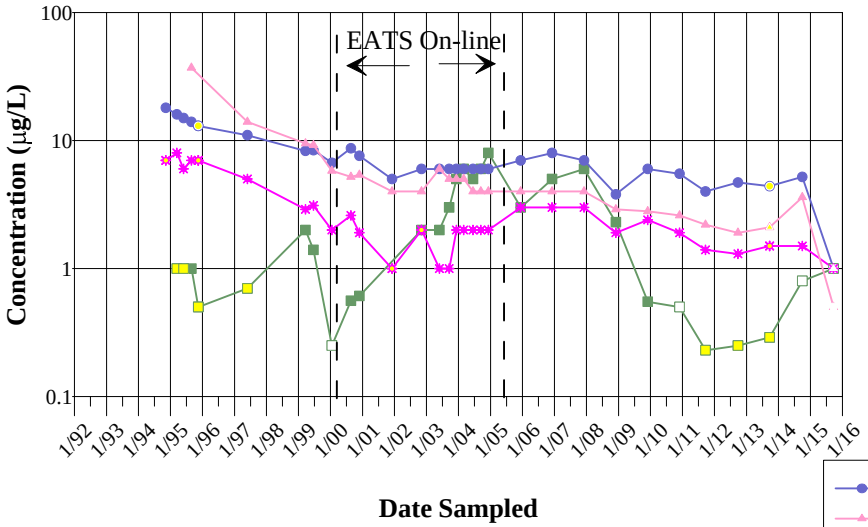
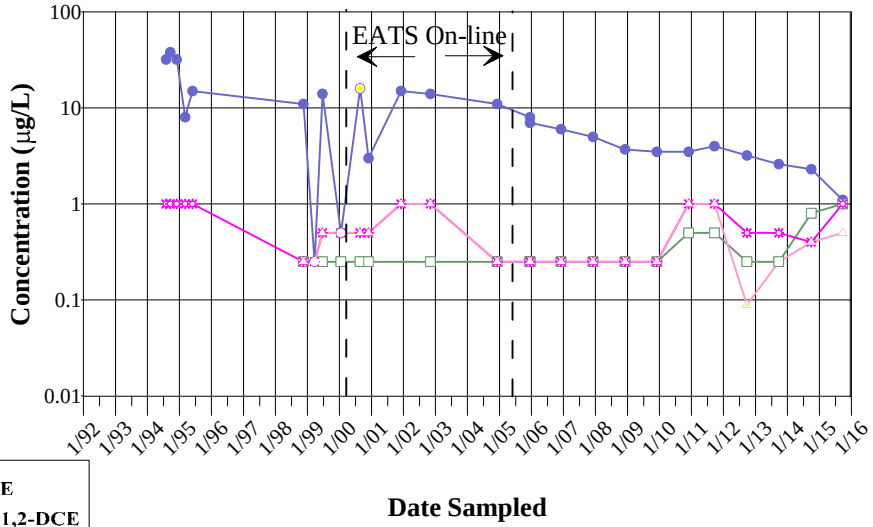


Figure 3-25 WU5-4 (Upper Portion of the A Aquifer)



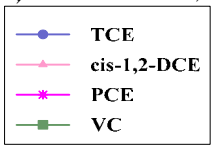


Figure 3-26 WU5-10 (Upper Portion of the A Aquifer)

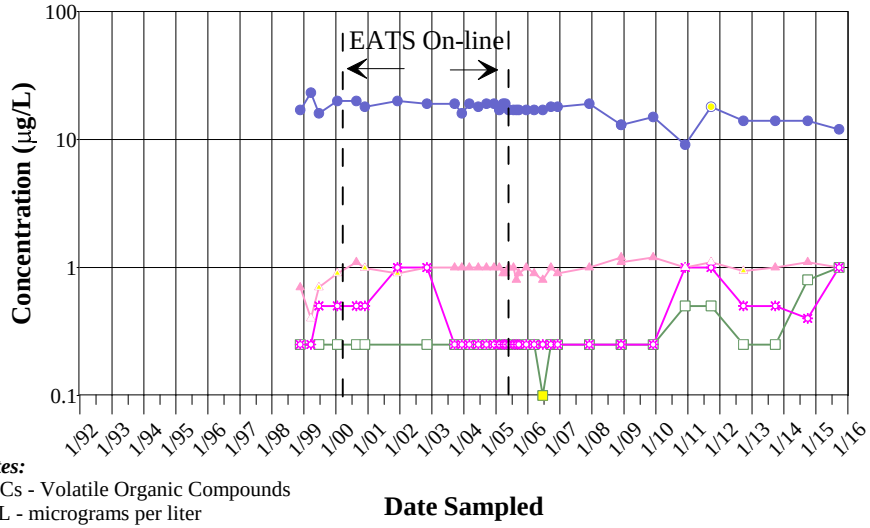
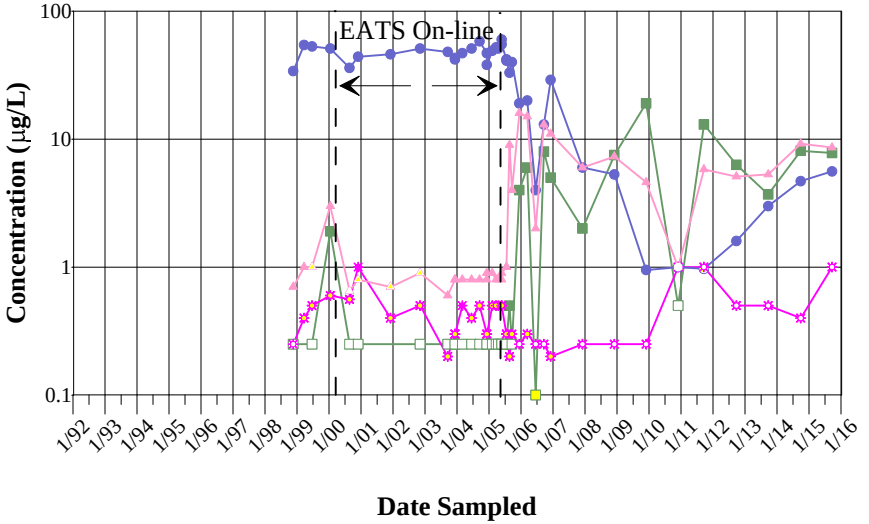


Figure 3-27 WU5-14 (Upper Portion of the A Aquifer)



Notes:
VOCs - Volatile Organic Compounds
µg/L - micrograms per liter
TCE - trichloroethene; cis-1,2-DCE - cis-1,2,-dichloroethene; PCE - tetrachloroethene; VC - vinyl chloride
Open symbols indicate non-detect values. Yellow symbols indicate estimated values. Closed-line colored symbols indicate concentrations detected.
Non-detects are plotted at the reporting limits.

FIGURES 3-28 THROUGH 3-29
TIME SERIES OF VOCs CONCENTRATION PLOTS
IR SITE 26

Figure 3-28 WU5-21 (Upper Portion of the A Aquifer)

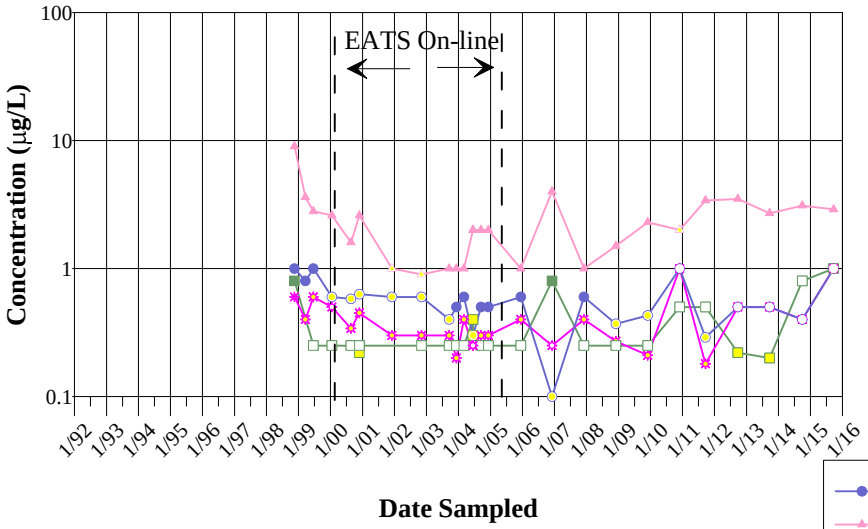
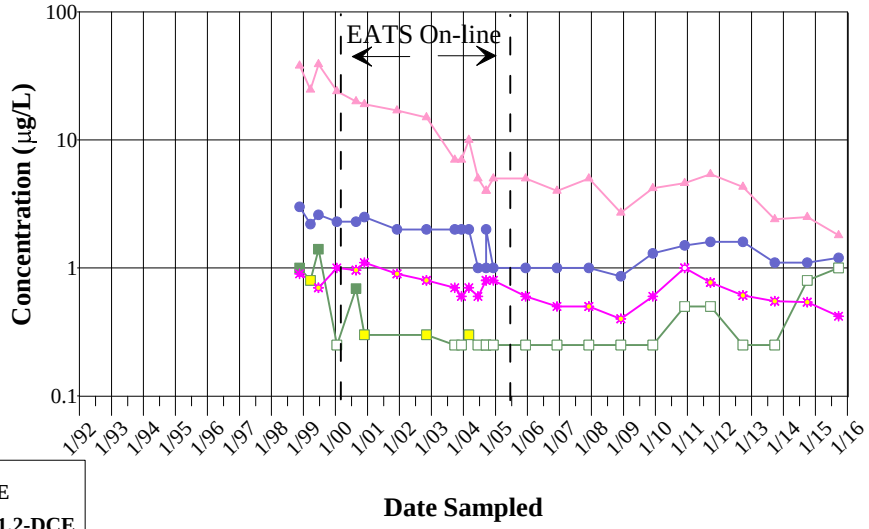
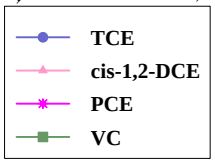
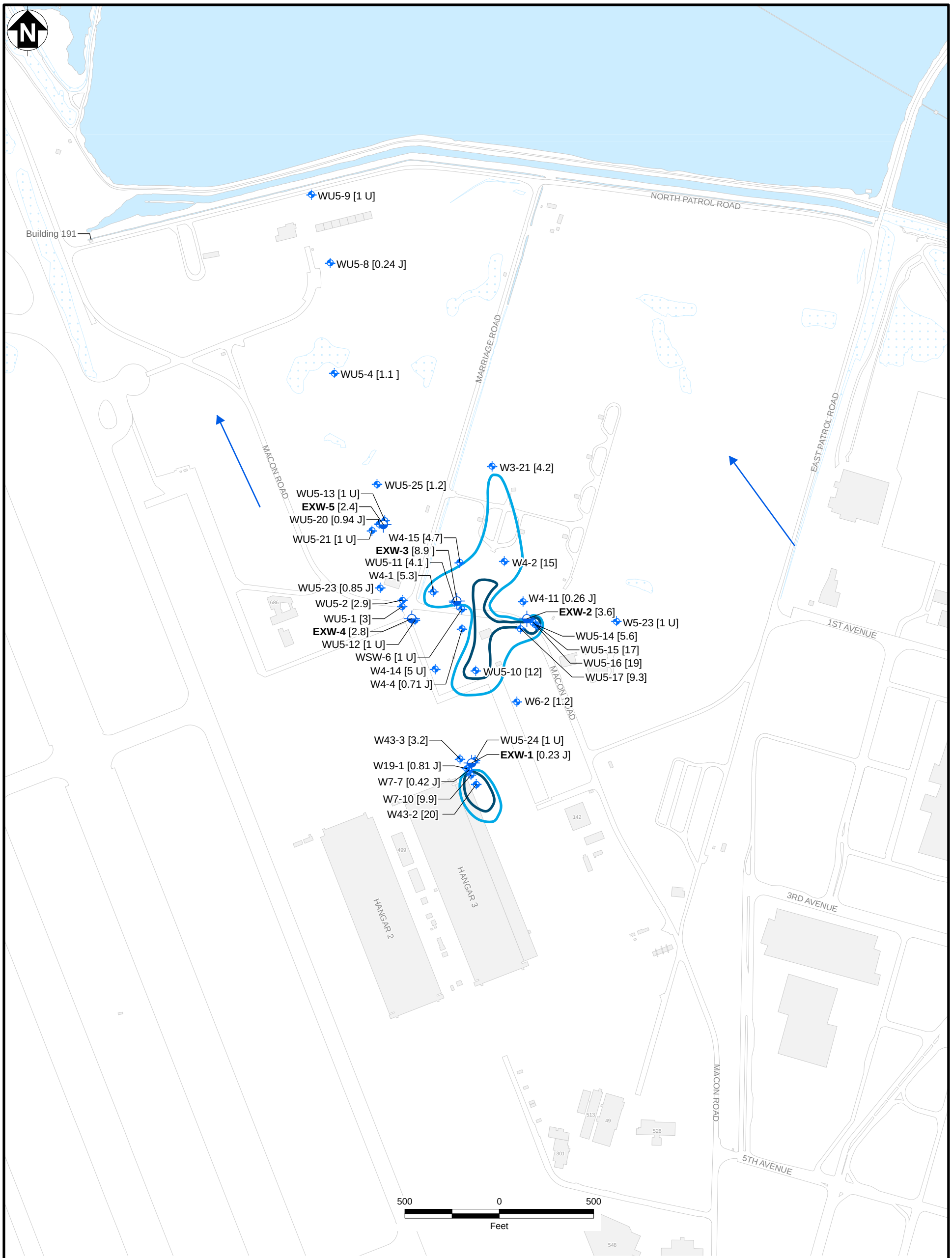


Figure 3-29 WU5-25 (Upper Portion of the A Aquifer)





Notes:
VOCs - Volatile Organic Compounds
µg/L - micrograms per liter
TCE - trichloroethene; cis-1,2-DCE - cis-1,2,-dichloroethene; PCE - tetrachloroethene; VC - vinyl chloride
Open symbols indicate non-detect values. Yellow symbols indicate estimated values. Closed-line colored symbols indicate concentrations detected.
Non-detects are plotted at the reporting limits.



NAVY EXTRACTION WELL

NAVY MONITORING WELL

TCE ISOCONCENTRATION CONTOUR - 10 µg/L

TCE ISOCONCENTRATION CONTOUR - 5 µg/L

GROUNDWATER FLOW DIRECTION

ROAD

FACILITY INFRASTRUCTURE

WATER

WETLAND

Notes:

1. Samples collected Sept 22-24, 2015
2. For wells within 20 ft of eachother, the highest concentration was contoured
3. TCE concentration shown in µg/L

µg/L - Micrograms per Liter
IR - Installation Restoration
J - Estimated Value
NAS - Naval Air Station
U - Not Detected

SES-TECH

BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

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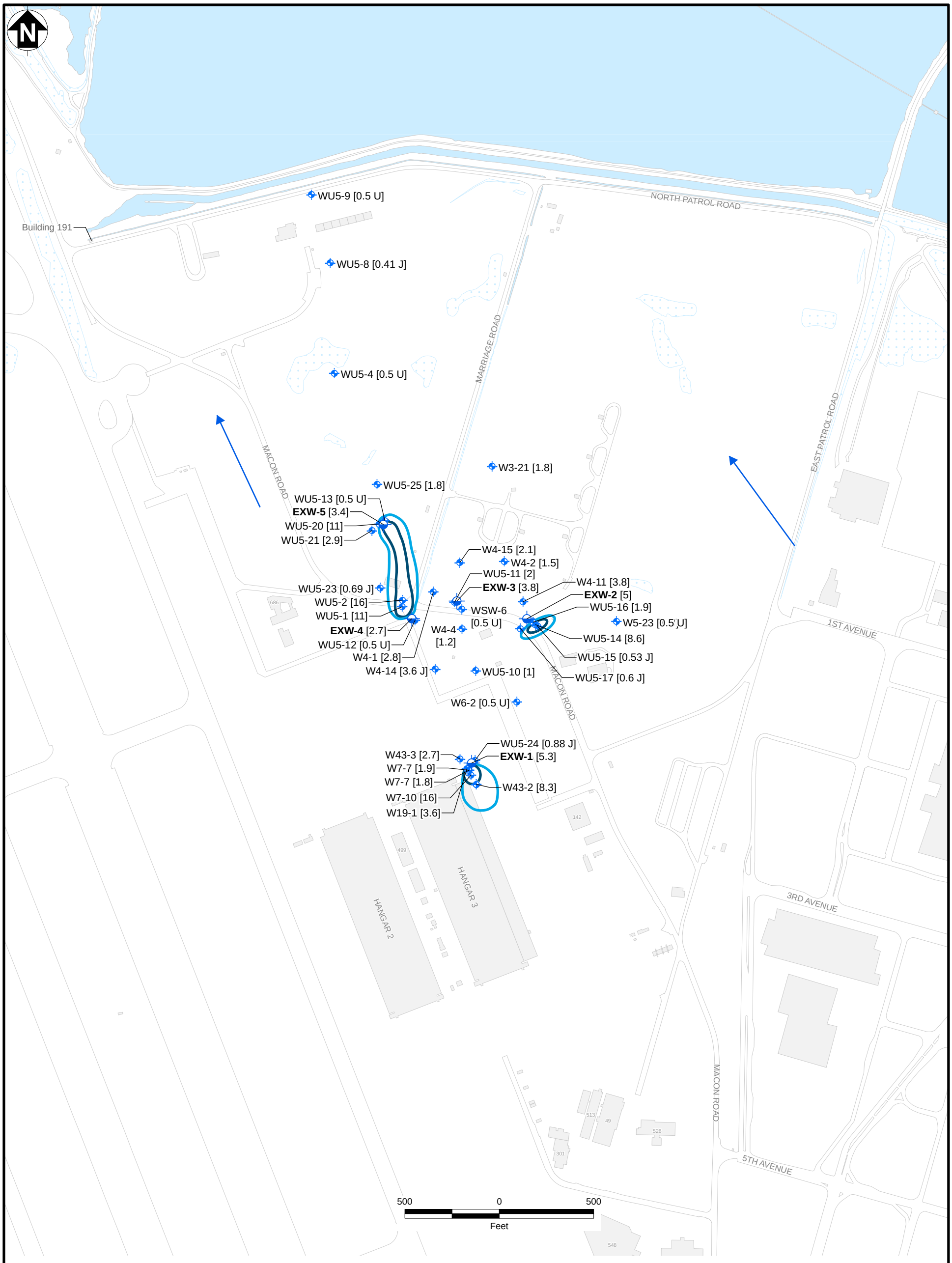
FIGURE 3-30

TRICHLOROETHENE (TCE) DISTRIBUTION IR SITE 26, UPPER PORTION OF THE A AQUIFER - SEPTEMBER 2015

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA



NAVY EXTRACTION WELL

NAVY MONITORING WELL

cis-1,2-DCE ISOCONCENTRATION CONTOUR - 10 µg/L

cis-1,2-DCE ISOCONCENTRATION CONTOUR - 6 µg/L

GROUNDWATER FLOW DIRECTION

ROAD

FACILITY INFRASTRUCTURE

WATER

WETLAND

Notes:

1. Samples collected Sept 22-24, 2015
2. For wells within 20 ft of eachother, the highest concentration was contoured
3. cis-1,2-DCE concentration shown in µg/L

µg/L - Micrograms per Liter
IR - Installation Restoration
J - Estimated Value
NAS - Naval Air Station
U - Not Detected

SES-TECH

BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

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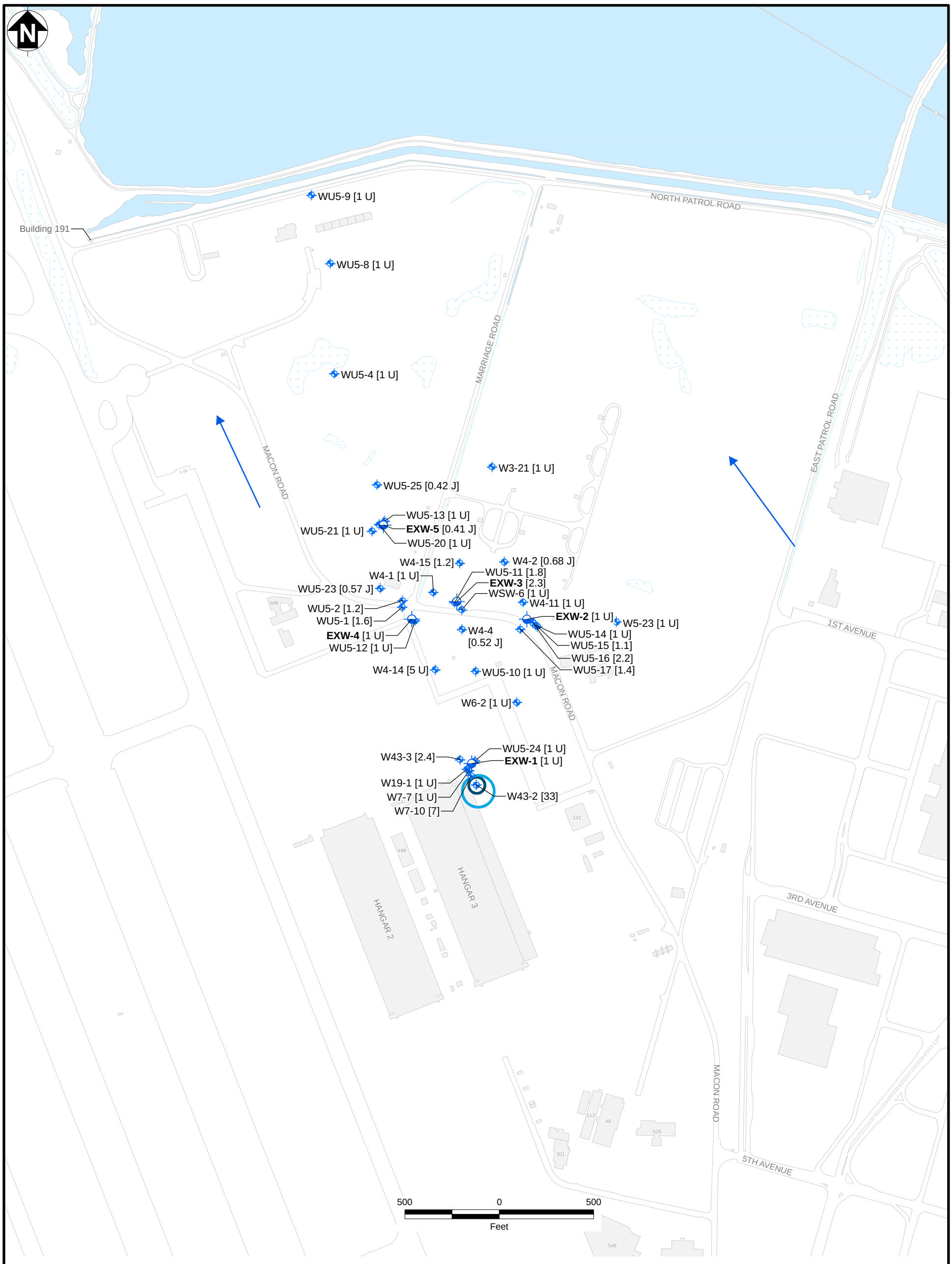
FIGURE 3-31

Cis-1,2-DICHLOROETHENE (cis-,1,2-DCE) DISTRIBUTION, IR SITE 26, UPPER PORTION OF THE A AQUIFER - SEPTEMBER 2015

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA



NAVY EXTRACTION WELL

NAVY MONITORING WELL

PCE ISOCONCENTRATION CONTOUR - 10 µg/L

PCE ISOCONCENTRATION CONTOUR - 5 µg/L

GROUNDWATER FLOW DIRECTION

ROAD

FACILITY INFRASTRUCTURE

WATER

WETLAND

Notes:

1. Samples collected Sept 22-24, 2015
2. For wells within 20 ft of eachother, the highest concentration was contoured
3. PCE concentration shown in µg/L

µg/L - Micrograms per Liter
IR - Installation Restoration
J - Estimated Value
NAS - Naval Air Station
U - Not Detected

SES-TECH

BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

2015 ANNUAL GROUNDWATER REPORT
FOR IR SITES 26 & 28

FIGURE 3-32

TETRACHLOROETHENE (PCE) DISTRIBUTION IR SITE 26, UPPER PORTION OF THE A AQUIFER - SEPTEMBER 2015

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA

NAVY EXTRACTION WELL

NAVY MONITORING WELL

VC ISOCONCENTRATION CONTOUR - 10 µg/L

VC ISOCONCENTRATION CONTOUR - 1.0 µg/L

GROUNDWATER FLOW DIRECTION

ROAD

FACILITY INFRASTRUCTURE

WATER

WETLAND

Notes:

1. Samples collected Sept 22-24, 2015
2. For wells within 20 ft of eachother, the highest concentration was contoured
3. VC concentration shown in µg/L

µg/L - Micrograms per Liter
IR - Installation Restoration
J - Estimated Value
NAS - Naval Air Station
U - Not Detected

SES-TECH

BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

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FOR IR SITES 26 & 28

FIGURE 3-33
VINYL CHLORIDE (VC) DISTRIBUTION
IR SITE 26, UPPER PORTION
OF THE A AQUIFER - SEPTEMBER 2015

FORMER NAS MOFFETT FIELD, MOFFETT FIELD, CALIFORNIA