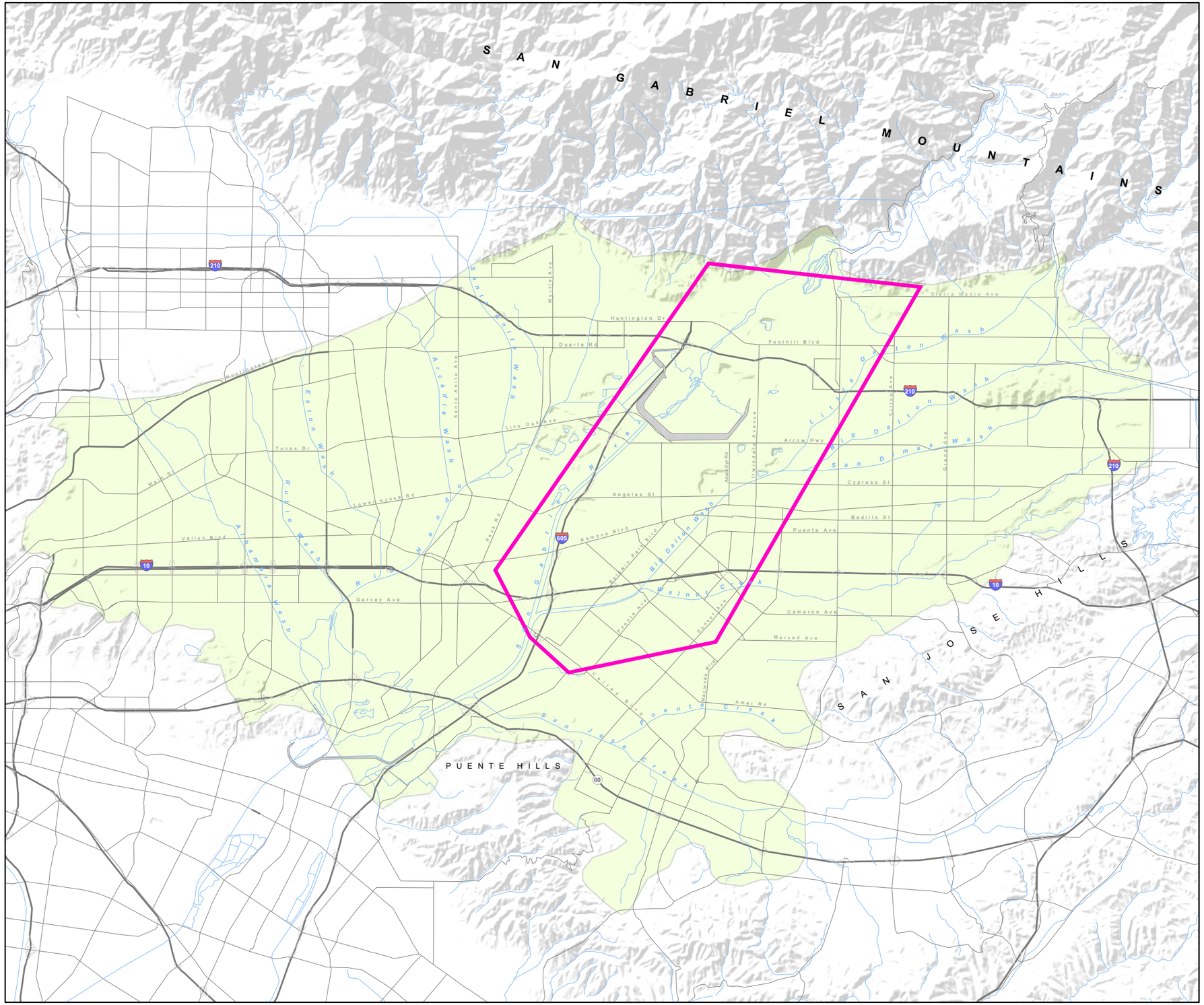


EXPLANATION

- Approximate BPOU boundary
- Extent of BPOU groundwater model

10,000 0 10,000

SCALE IN FEET

N

BPOU LOCATION MAP

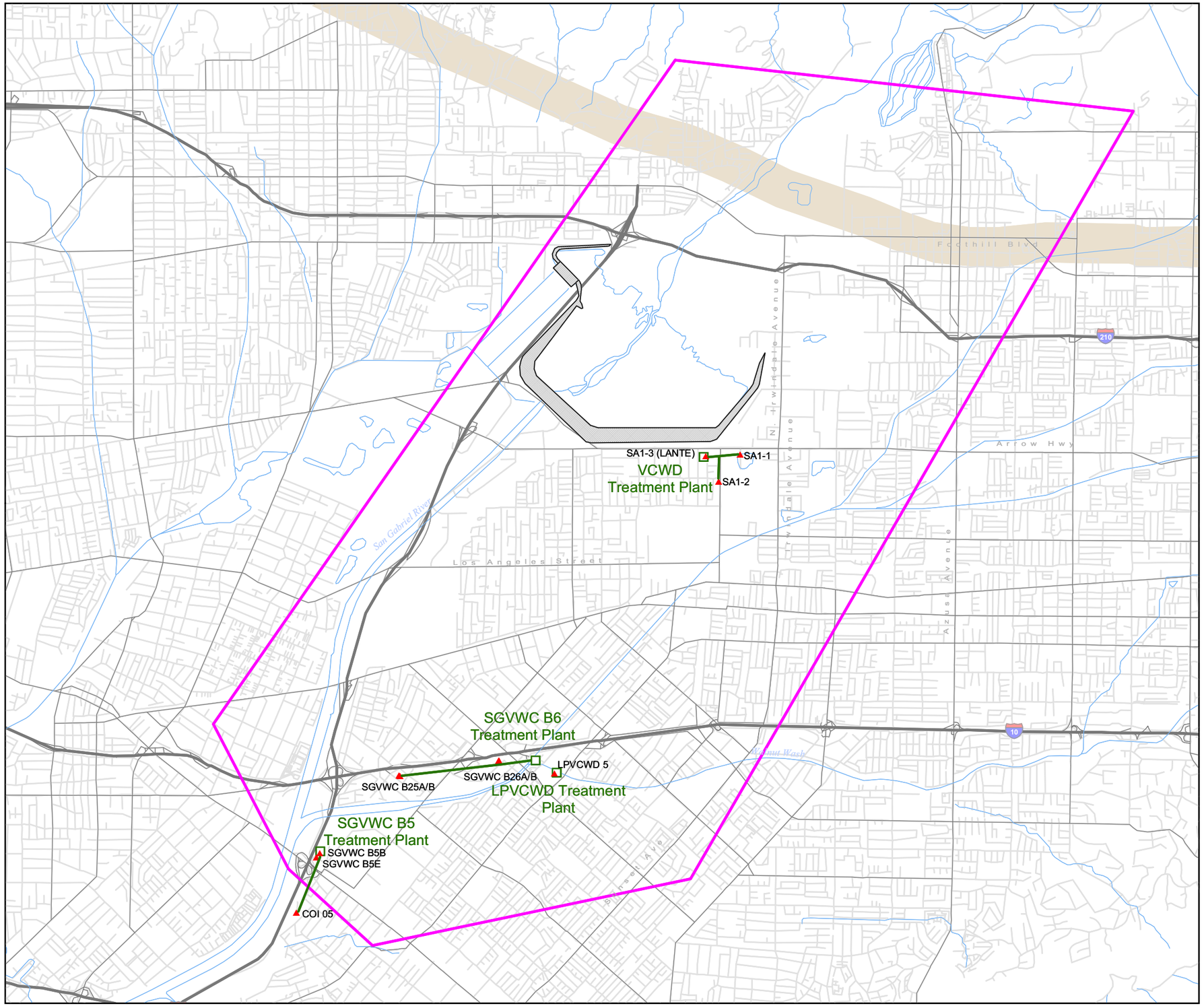
Baldwin Park Operable Unit
San Gabriel Valley, California

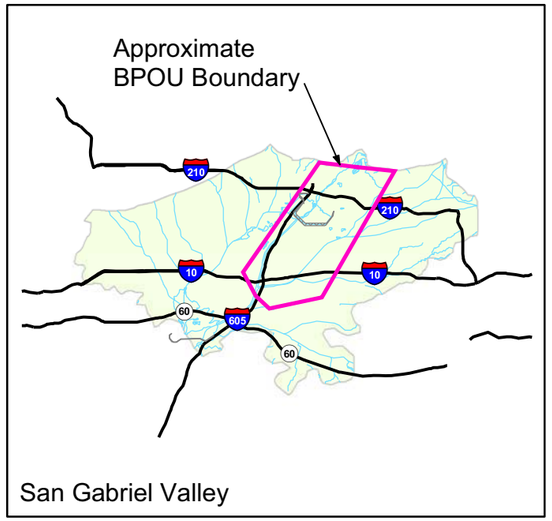
amec

Project No. 7190

Figure **1-1**

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual_Report-Maps\201111-01_BPOU_LocationMap.mxd





EXPLANATION

- Extraction well
- Treatment plant
- Raw water pipeline
- Approximate BPOU boundary
- Duarte Fault Zone

5,000 0 5,000

SCALE IN FEET

N

BPOU PROJECT INFRASTRUCTURE MAP

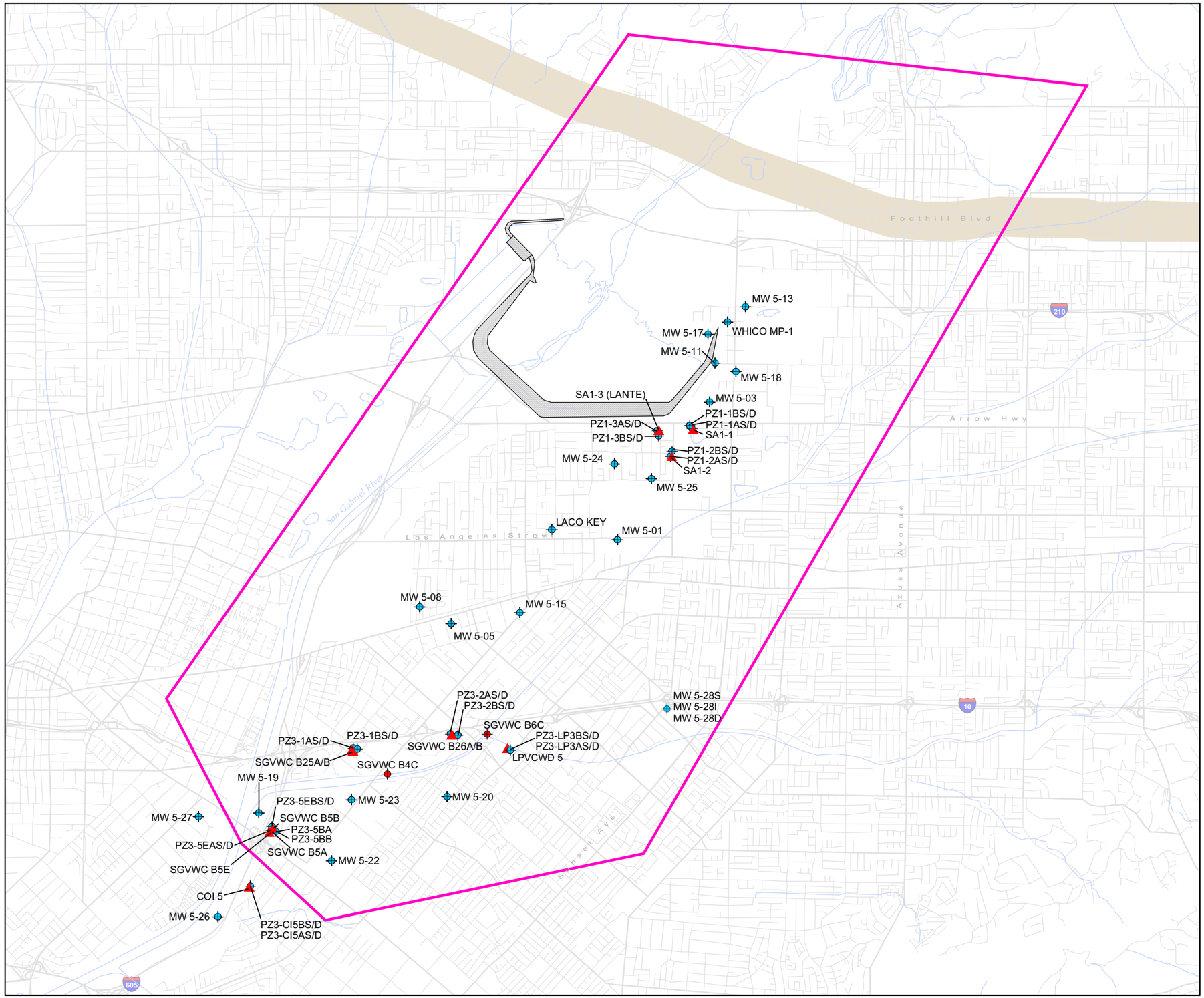
Baldwin Park Operable Unit
San Gabriel Valley, California

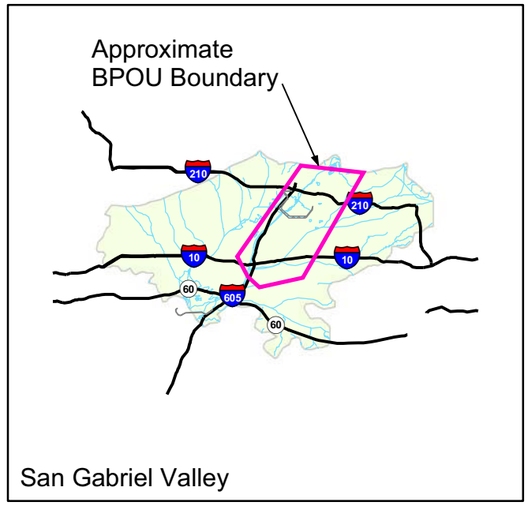
amec

Project No. 7190

Figure **1-2**

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual_Report-Maps\201111-02_BPOU_Infrastructure.mxd





EXPLANATION

- Multiport or monitoring well
- Extraction well
- Production well
- Approximate BPOU boundary
- Duarte Fault Zone

5,000 0 5,000

SCALE IN FEET

N

BPOU POTENTIOMETRIC MONITORING NETWORK

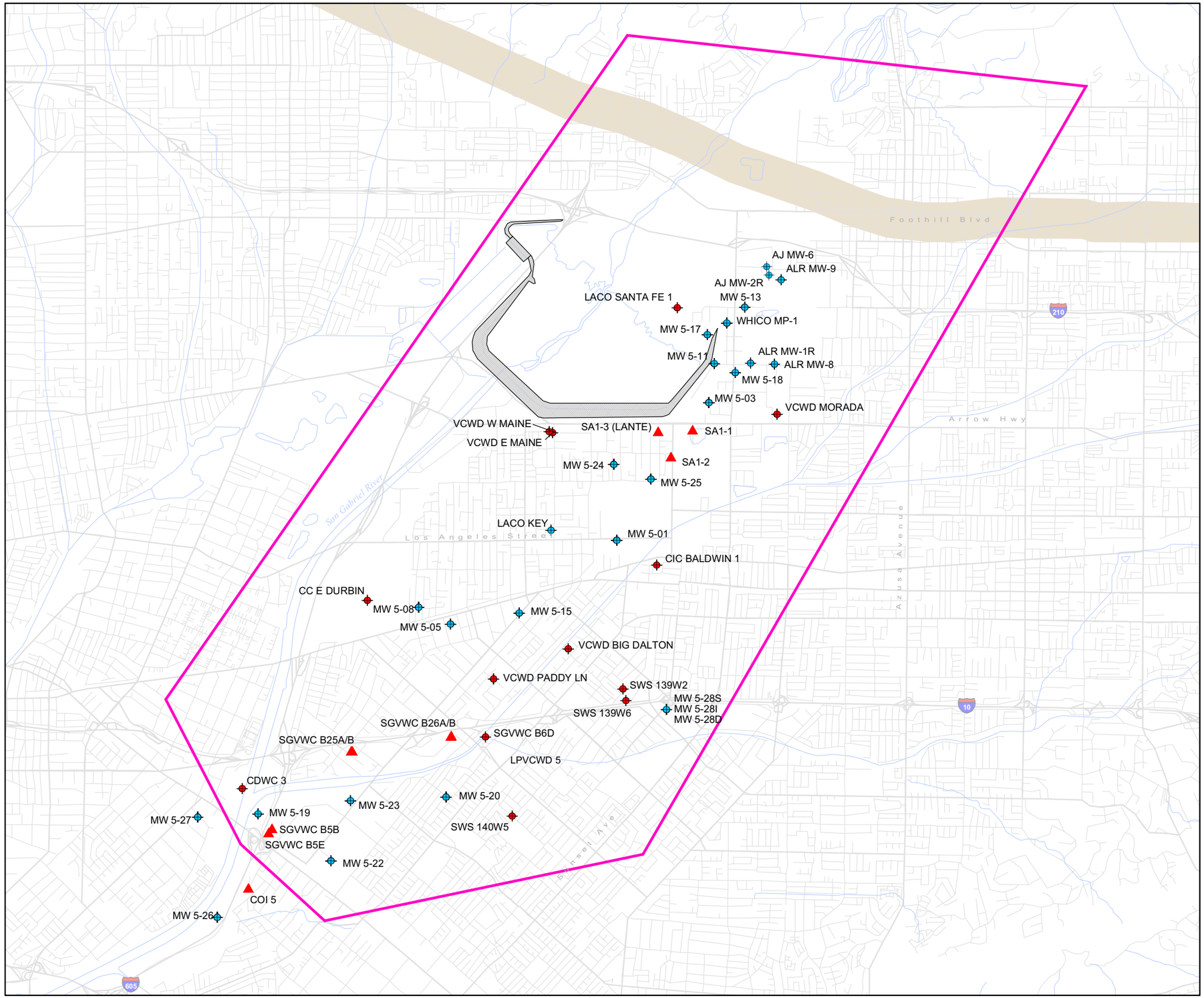
Baldwin Park Operable Unit
San Gabriel Valley, California

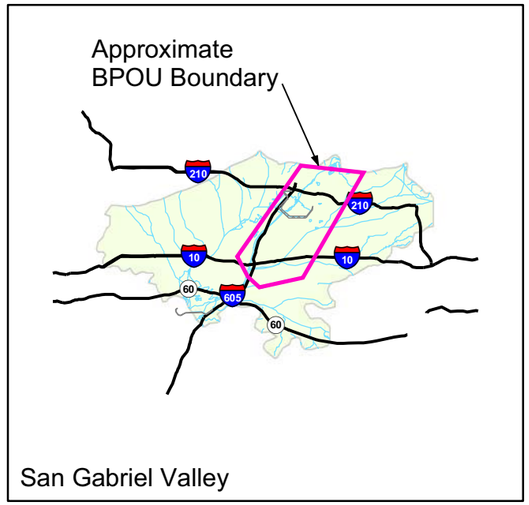
amec

Project No. 7190

Figure **3-1**

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual_Report-Maps\20113-01_Pot_network_map.mxd





EXPLANATION

- Multiport or monitoring well
- Extraction well
- Production well
- Approximate BPOU boundary
- Duarte Fault Zone

5,000 0 5,000

SCALE IN FEET

N

BPOU GROUNDWATER QUALITY MONITORING NETWORK

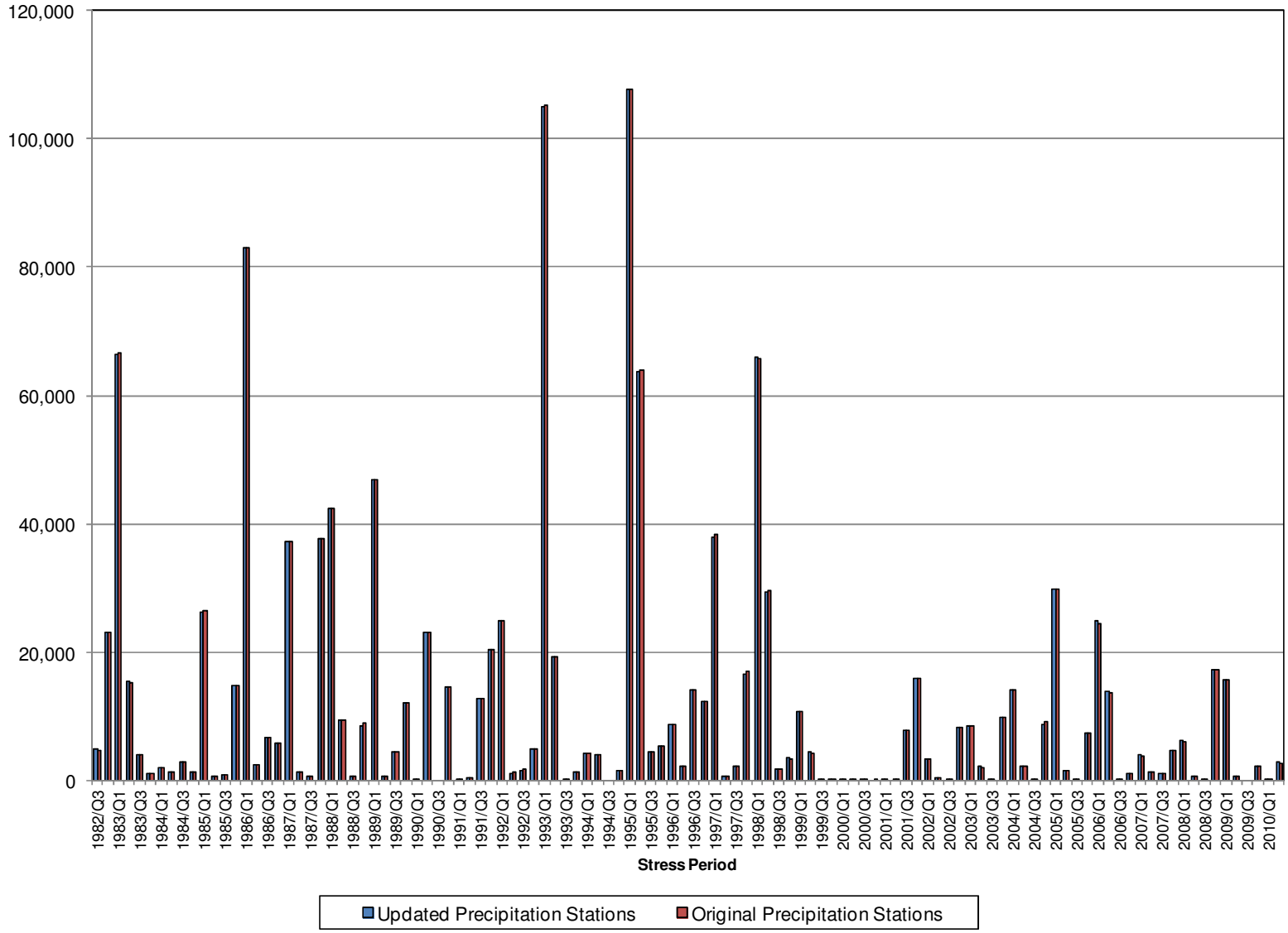
Baldwin Park Operable Unit
San Gabriel Valley, California

amec

Project No. 7190

Figure **3-2**

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual_Report-Maps\20113-02_Qual_network_map.mxd

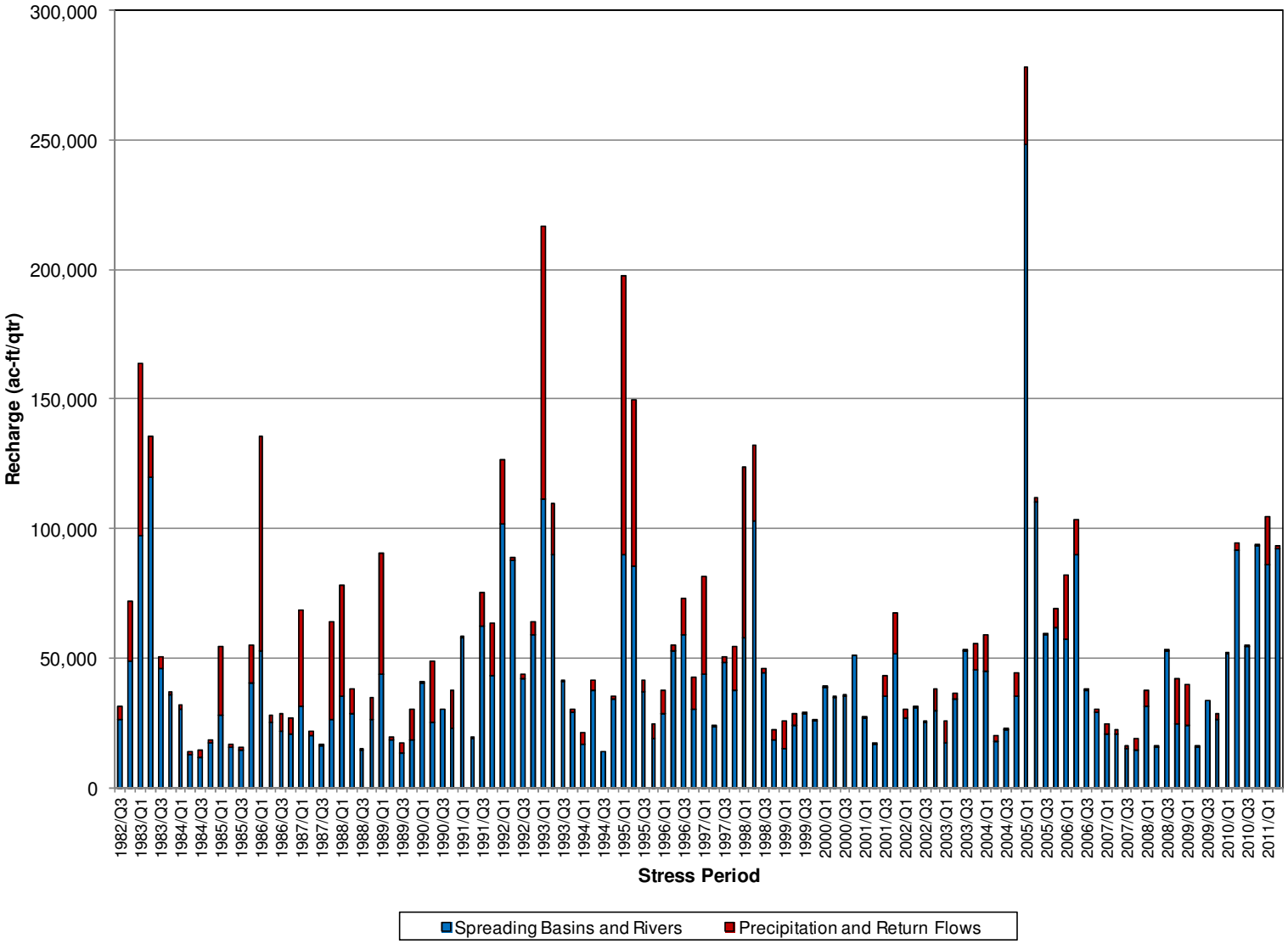


amec

COMPARISON OF PRECIPITATION AND RETURN FLOW RECHARGE USING UPDATED AND ORIGINAL PRECIPITATION STATIONS
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No. 7190

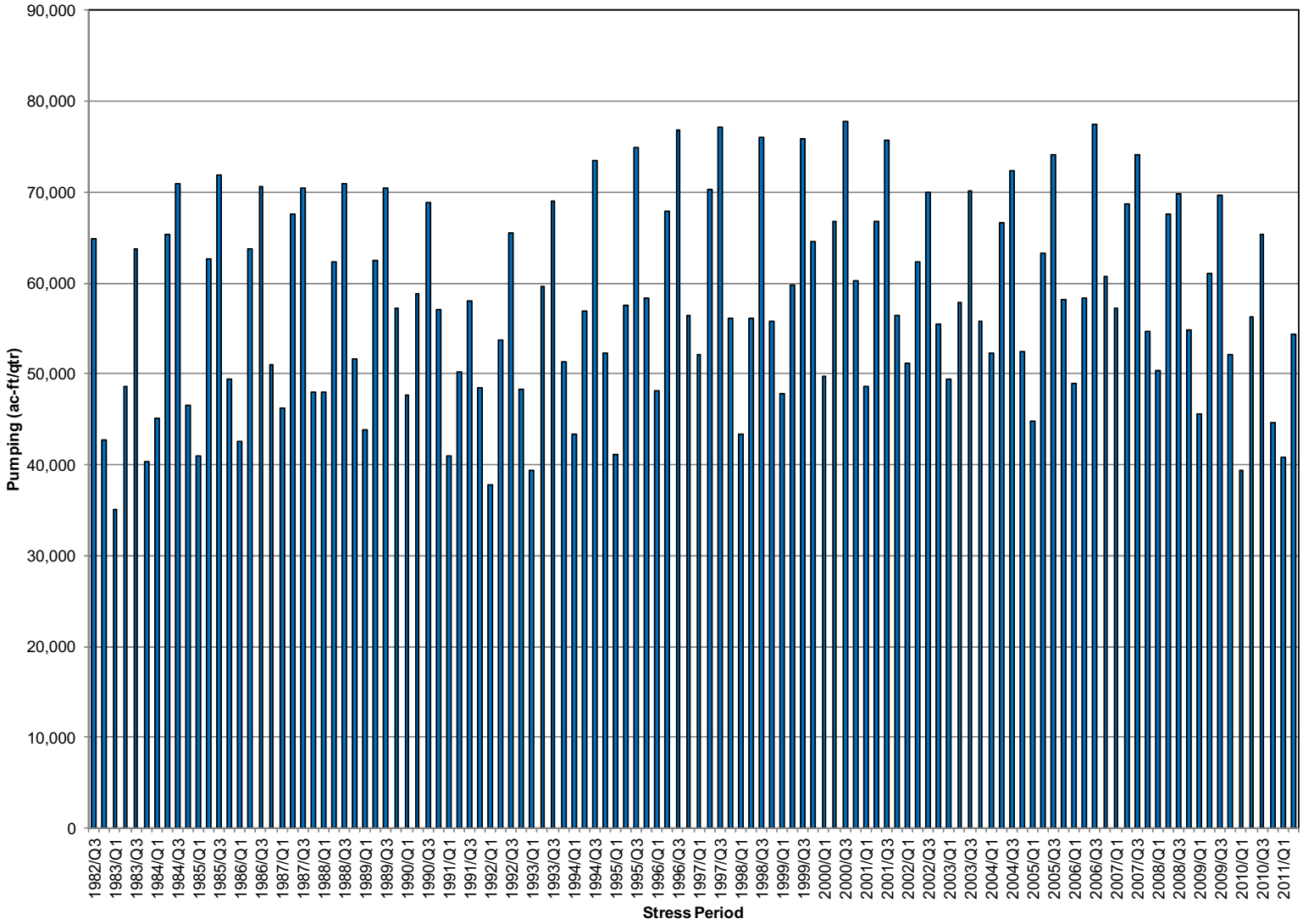
Figure **3-3**



SIMULATED QUARTERLY RECHARGE RATES
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No. 7190

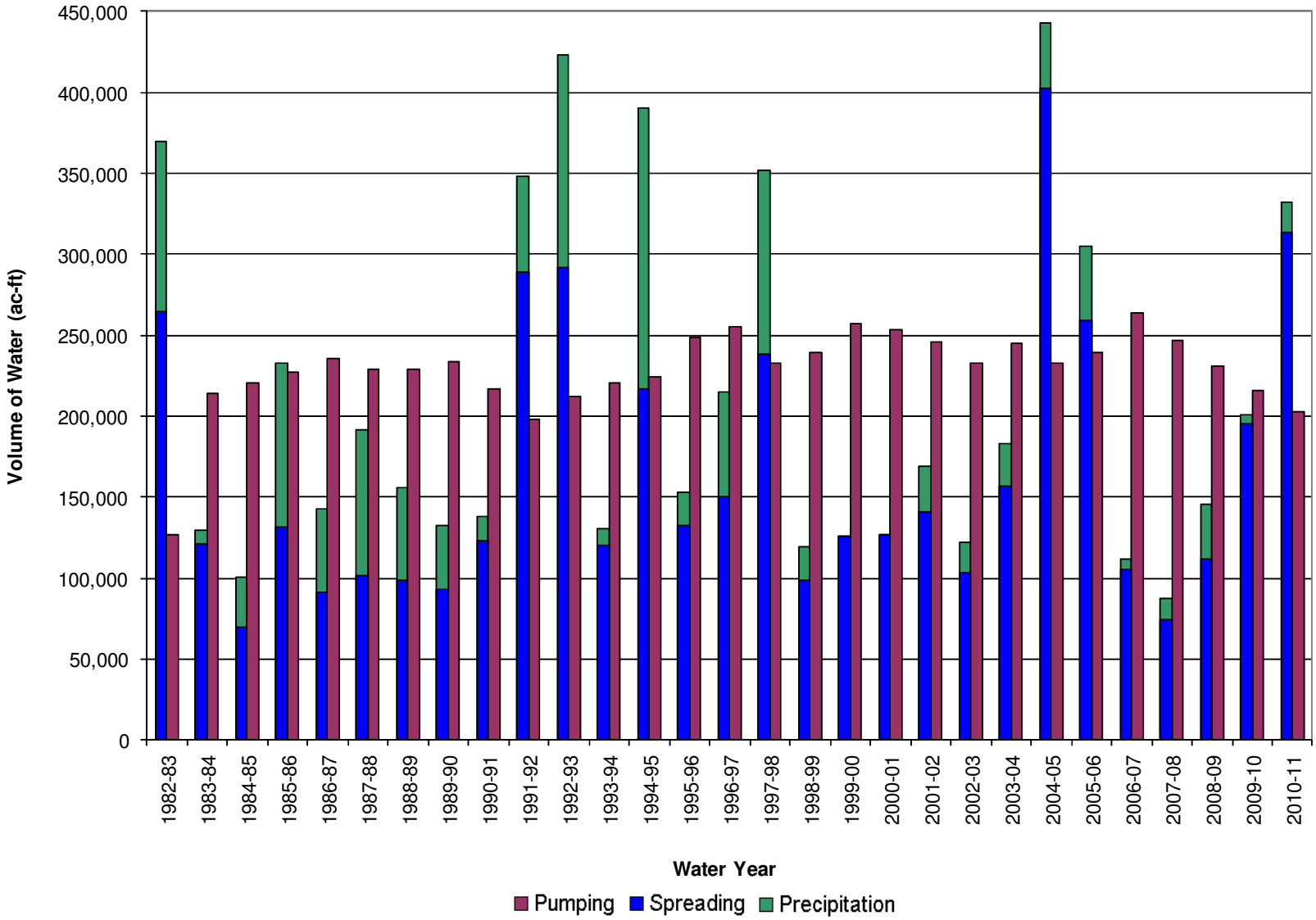
Figure **3-4**



SIMULATED QUARTERLY PUMPING RATES
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No. 7190

Figure **3-5**

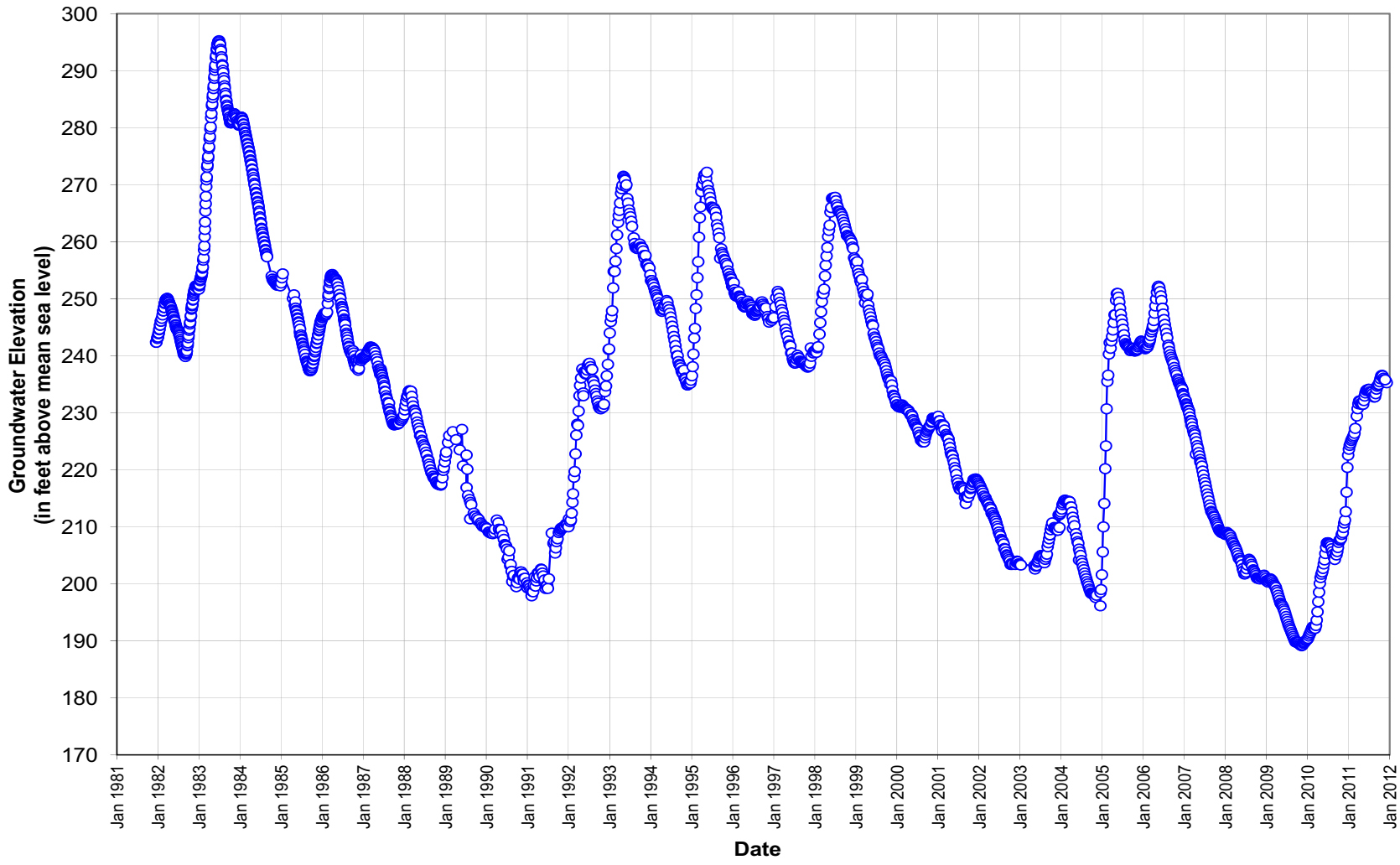


amec

SIMULATED ANNUAL RECHARGE AND PUMPING RATES
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No. 7190

Figure **3-6**

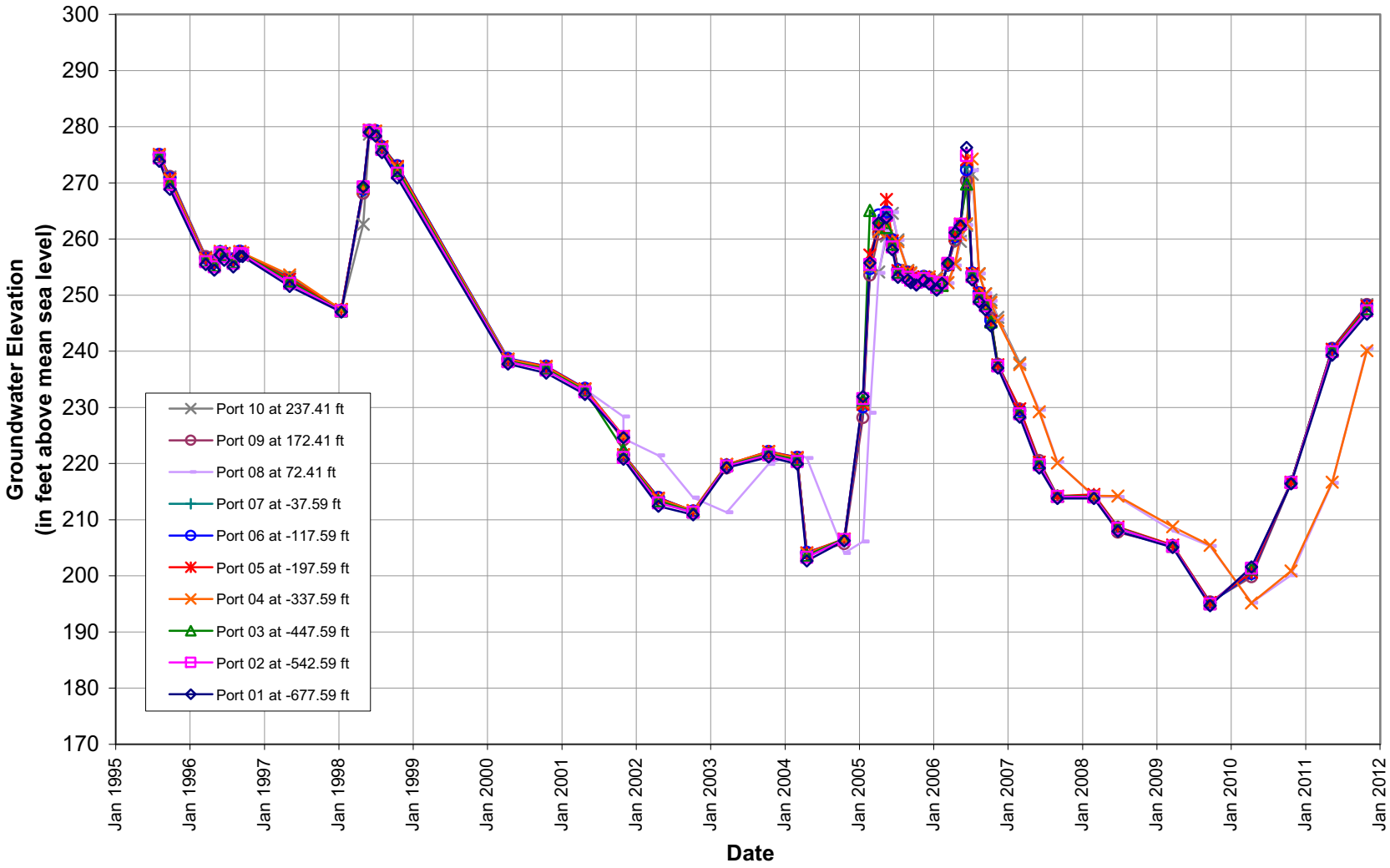


amec

LACO KEY WELL HYDROGRAPH
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No. 7190

Figure **5-1**

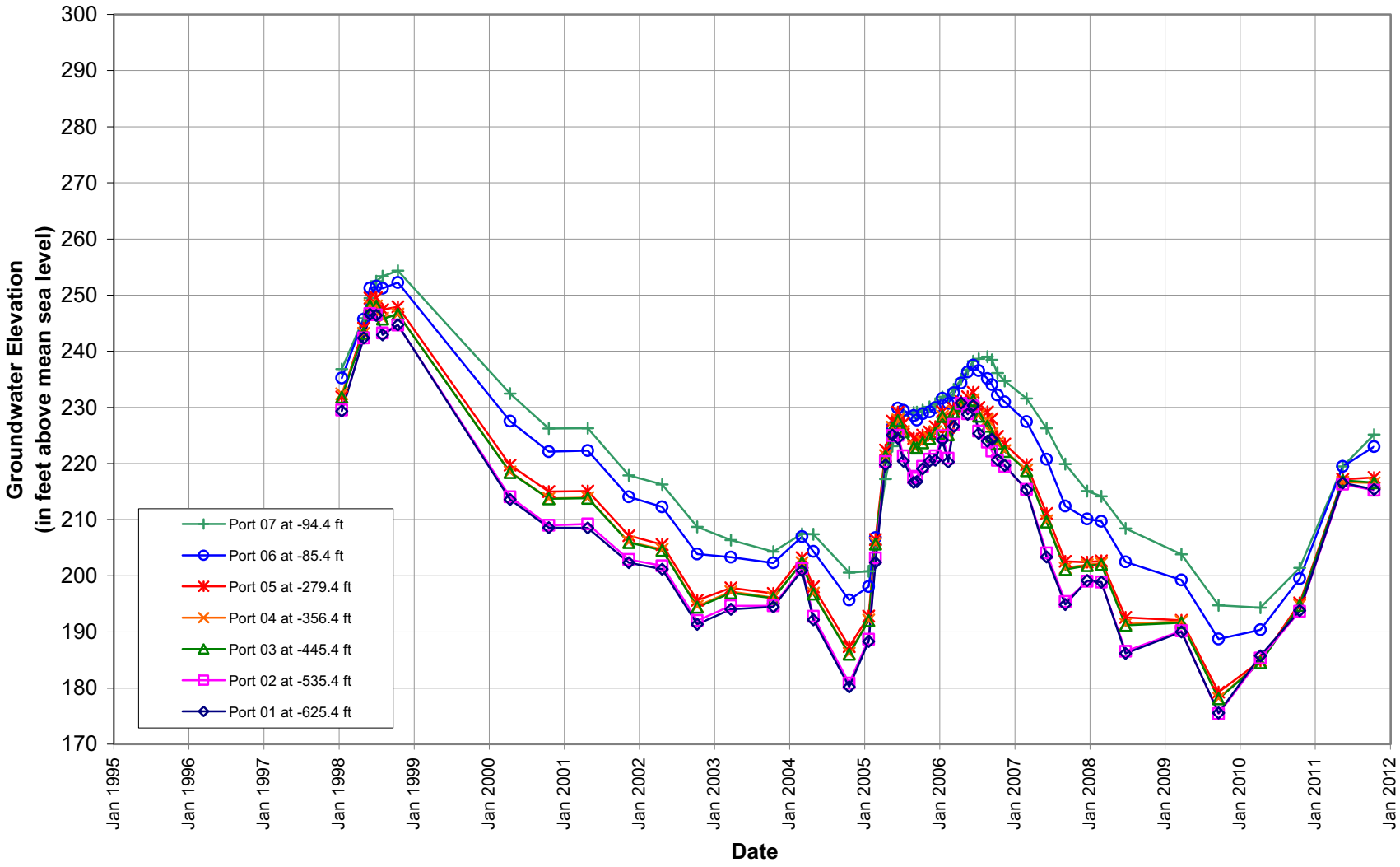


amec

MW 5-03 WELL HYDROGRAPH
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No. 7190

Figure **5-2**

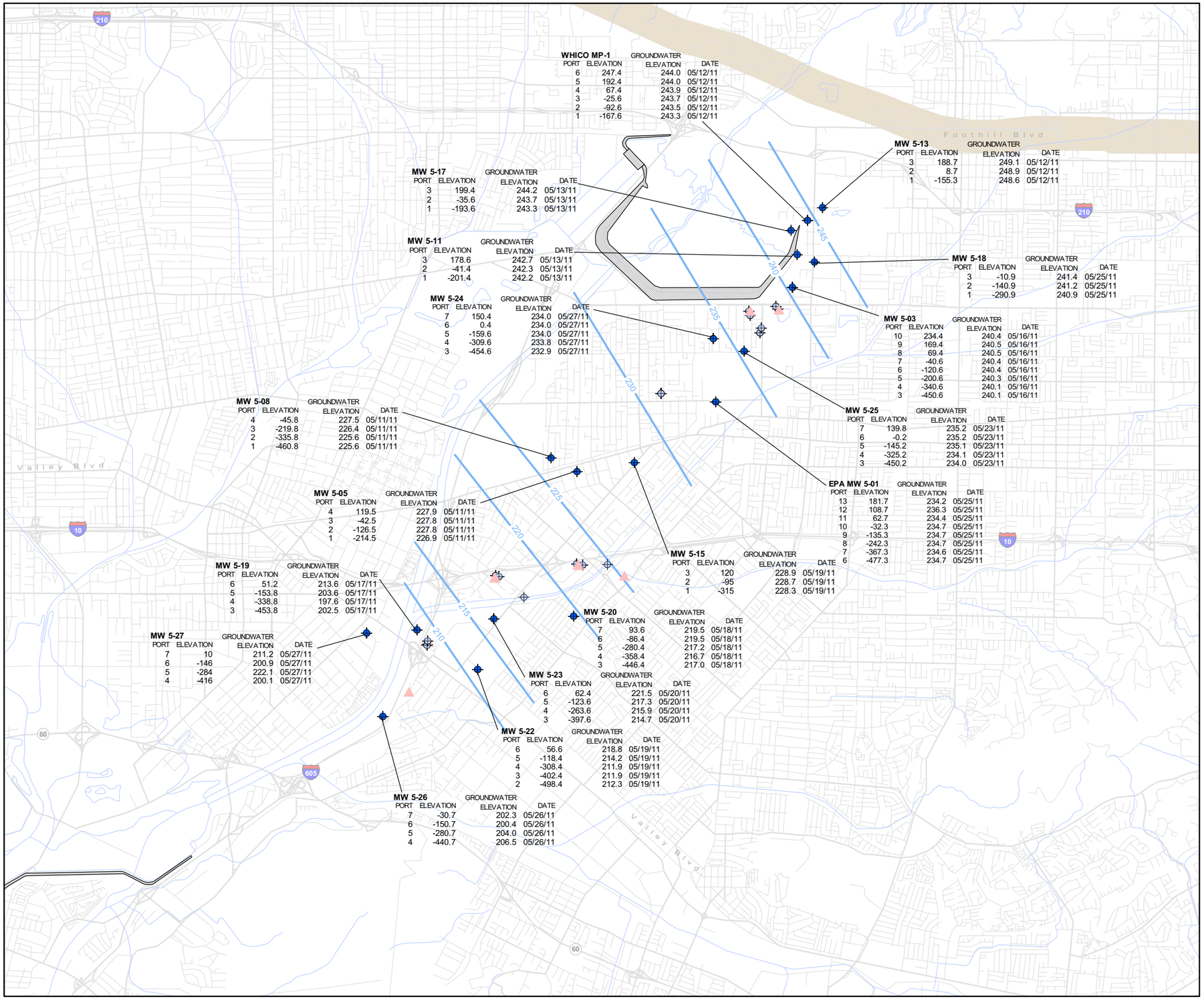


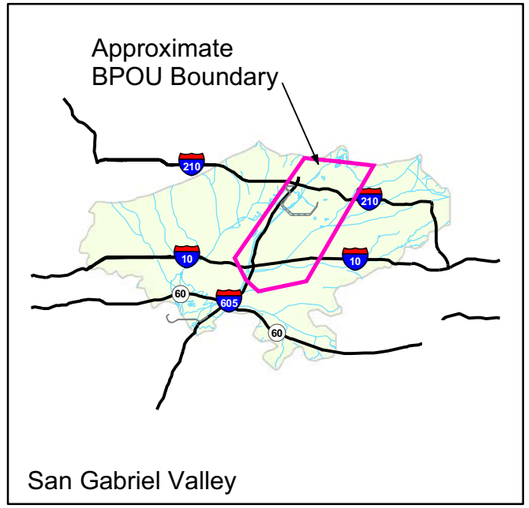
amec

MW 5-20 WELL HYDROGRAPH
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No. 7190

Figure **5-3**





EXPLANATION

- Multiport well
- Monitoring, multiport, or production well (not included in contouring)
- Extraction well (not included in contouring)
- 200 Potentiometric surface contour (elevation in feet above mean sea level) Contour interval 5 feet
- Duarte Fault Zone

NOTES:

1. The potentiometric contours shown represent interpreted groundwater elevations based on water levels measured in the wells during May 2011 as part of the Performance Standards Evaluation Plan. The interpreted contours should not be assumed to represent the precise groundwater elevation at any point along the contour line.

5,000 0 5,000
Feet

N

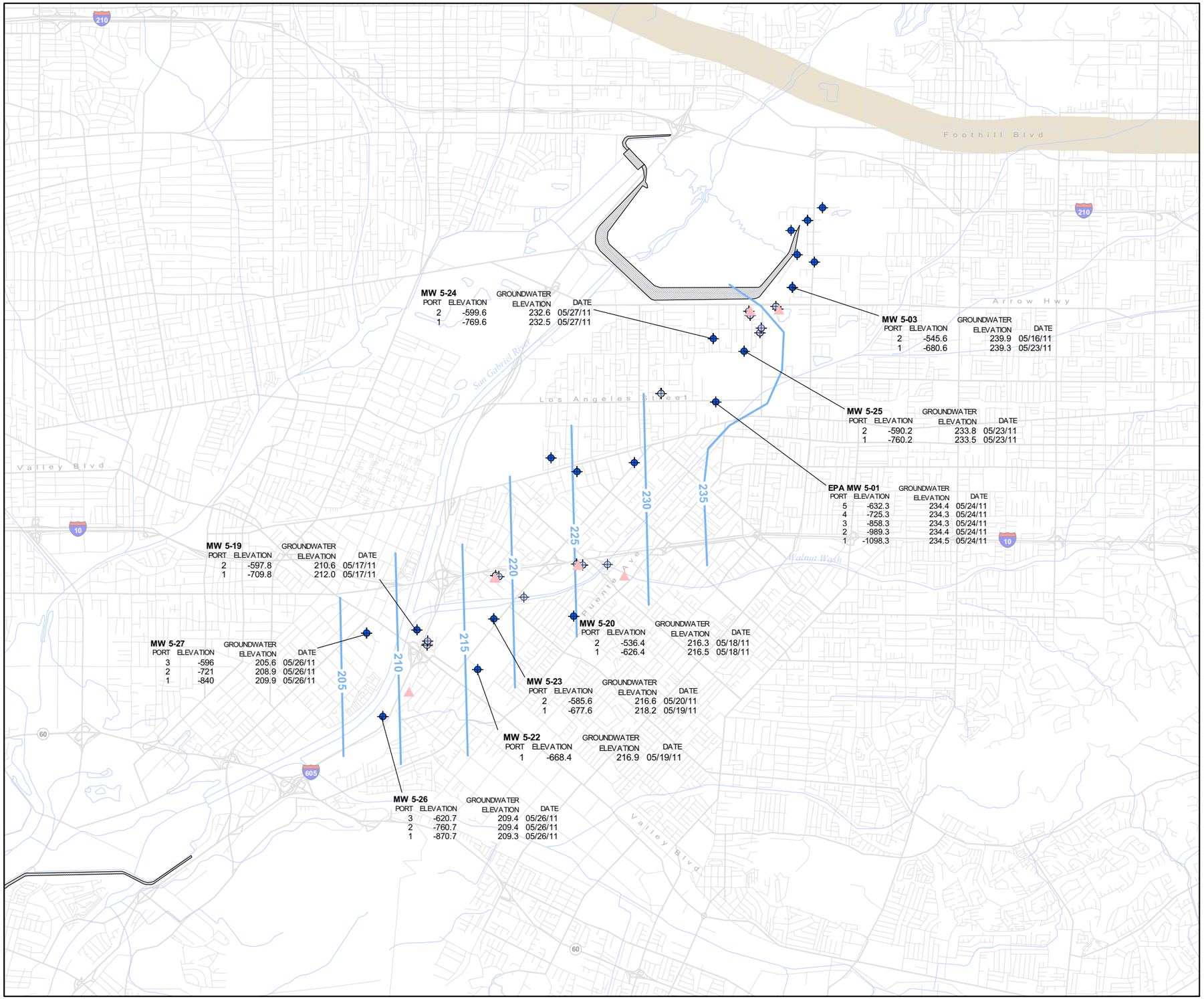
GENERALIZED MAY 2011
POTENTIOMETRIC SURFACE
ABOVE -500 FEET MSL
Baldwin Park Operable Unit
San Gabriel Valley, California

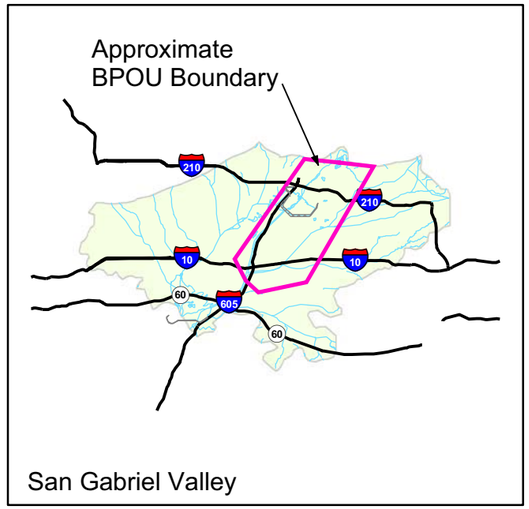
amec

Project No. 7190

Figure 5-4

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual_Report-Water_Levels\201115-04_MAY_GW_Elevations_above_-500MSL.mxd





EXPLANATION

- Multiport well
- Monitoring, multiport, or production well (not included in contouring)
- Extraction well (not included in contouring)
- -200- Potentiometric surface contour (elevation in feet above mean sea level) Contour interval 5 feet
- Duarte Fault Zone

NOTES:

1. The potentiometric contours shown represent interpreted groundwater elevations based on water levels measured in the wells during May 2011 as part of the Performance Standards Evaluation Plan. The interpreted contours should not be assumed to represent the precise groundwater elevation at any point along the contour line.

5,000 0 5,000
Feet

N

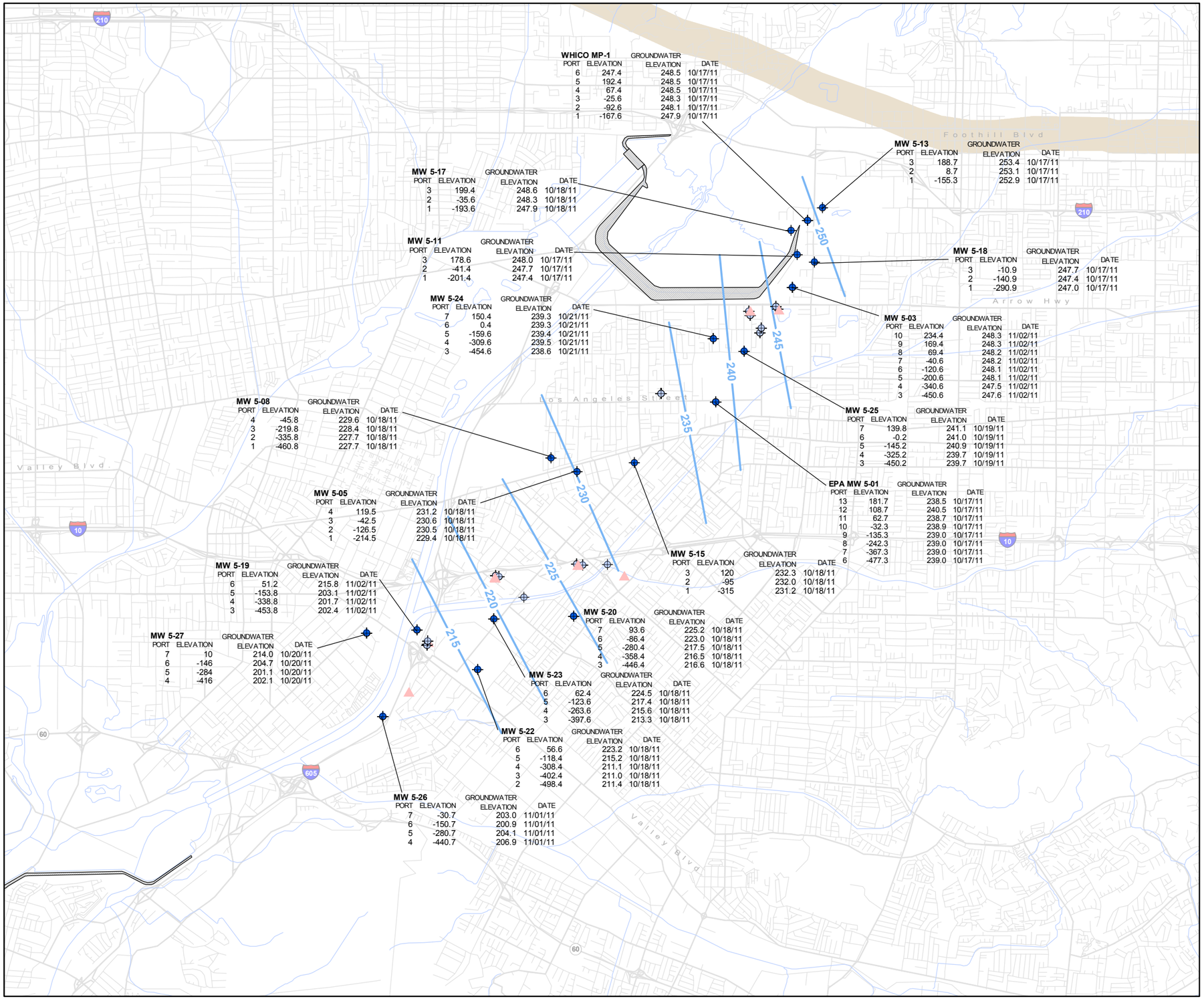
GENERALIZED MAY 2011
POTENTIOMETRIC SURFACE
BELOW -500 FEET MSL
Baldwin Park Operable Unit
San Gabriel Valley, California

amec

Project No. 7190

Figure 5-5

\\den-fs1\GIS\Projects\Aerojet 7190\GIS_maps\Annual Report-Water Levels\2011\5-05 MAY GW Elevations below -500MSL.mxd



WHICO MP-1

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
6	247.4	248.5	10/17/11
5	192.4	248.5	10/17/11
4	67.4	248.5	10/17/11
3	-25.6	248.3	10/17/11
2	-92.6	248.1	10/17/11
1	-167.6	247.9	10/17/11

MW 5-13

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
3	188.7	253.4	10/17/11
2	8.7	253.1	10/17/11
1	-155.3	252.9	10/17/11

MW 5-17

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
3	199.4	248.6	10/18/11
2	-35.6	248.3	10/18/11
1	-193.6	247.9	10/18/11

MW 5-11

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
3	178.6	248.0	10/17/11
2	-41.4	247.7	10/17/11
1	-201.4	247.4	10/17/11

MW 5-18

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
3	-10.9	247.7	10/17/11
2	-140.9	247.4	10/17/11
1	-290.9	247.0	10/17/11

MW 5-24

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
7	150.4	239.3	10/21/11
6	0.4	239.3	10/21/11
5	-159.6	239.4	10/21/11
4	-309.6	239.5	10/21/11
3	-454.6	238.6	10/21/11

MW 5-03

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
10	234.4	248.3	11/02/11
9	169.4	248.3	11/02/11
8	69.4	248.2	11/02/11
7	-40.6	248.2	11/02/11
6	-120.6	248.1	11/02/11
5	-200.6	248.1	11/02/11
4	-340.6	247.5	11/02/11
3	-450.6	247.6	11/02/11

MW 5-08

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
4	-45.8	229.6	10/18/11
3	-219.8	228.4	10/18/11
2	-335.8	227.7	10/18/11
1	-460.8	227.7	10/18/11

MW 5-25

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
7	139.8	241.1	10/19/11
6	-0.2	241.0	10/19/11
5	-145.2	240.9	10/19/11
4	-325.2	239.7	10/19/11
3	-450.2	239.7	10/19/11

MW 5-05

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
4	119.5	231.2	10/18/11
3	-42.5	230.6	10/18/11
2	-126.5	230.5	10/18/11
1	-214.5	229.4	10/18/11

EPA MW 5-01

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
13	181.7	238.5	10/17/11
12	108.7	240.5	10/17/11
11	62.7	238.7	10/17/11
10	-32.3	238.9	10/17/11
9	-135.3	239.0	10/17/11
8	-242.3	239.0	10/17/11
7	-367.3	239.0	10/17/11
6	-477.3	239.0	10/17/11

MW 5-15

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
3	120	232.3	10/18/11
2	-95	232.0	10/18/11
1	-315	231.2	10/18/11

MW 5-19

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
6	51.2	215.8	11/02/11
5	-153.8	203.1	11/02/11
4	-338.8	201.7	11/02/11
3	-453.8	202.4	11/02/11

MW 5-20

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
7	93.6	225.2	10/18/11
6	-86.4	223.0	10/18/11
5	-280.4	217.5	10/18/11
4	-358.4	216.5	10/18/11
3	-446.4	216.6	10/18/11

MW 5-27

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
7	10	214.0	10/20/11
6	-146	204.7	10/20/11
5	-284	201.1	10/20/11
4	-416	202.1	10/20/11

MW 5-23

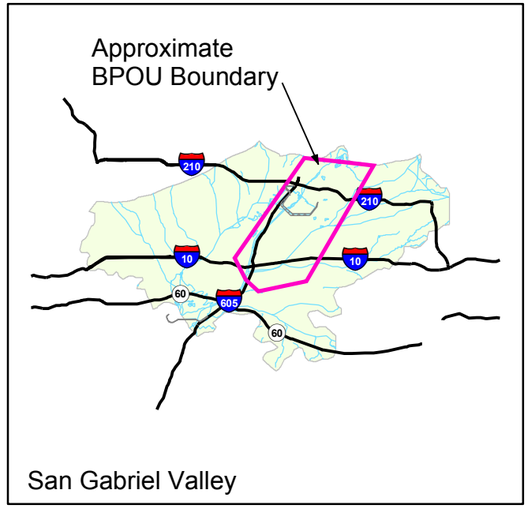
PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
6	62.4	224.5	10/18/11
5	-123.6	217.4	10/18/11
4	-263.6	215.6	10/18/11
3	-397.6	213.3	10/18/11

MW 5-22

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
6	56.6	223.2	10/18/11
5	-118.4	215.2	10/18/11
4	-308.4	211.1	10/18/11
3	-402.4	211.0	10/18/11
2	-498.4	211.4	10/18/11

MW 5-26

PORT	ELEVATION	GROUNDWATER ELEVATION	DATE
7	-30.7	203.0	11/01/11
6	-150.7	200.9	11/01/11
5	-280.7	204.1	11/01/11
4	-440.7	206.9	11/01/11



EXPLANATION

- Multiport well
- Monitoring, multiport, or production well (not included in contouring)
- Extraction well (not included in contouring)
- 215 Potentiometric surface contour (elevation in feet above mean sea level) Contour interval 5 feet
- Duarte Fault Zone

NOTES:

1. The potentiometric contours shown represent interpreted groundwater elevations based on water levels measured in the wells during October 2011 as part of the Performance Standards Evaluation Plan. The interpreted contours should not be assumed to represent the precise groundwater elevation at any point along the contour line.

5,000 0 5,000
Feet

N

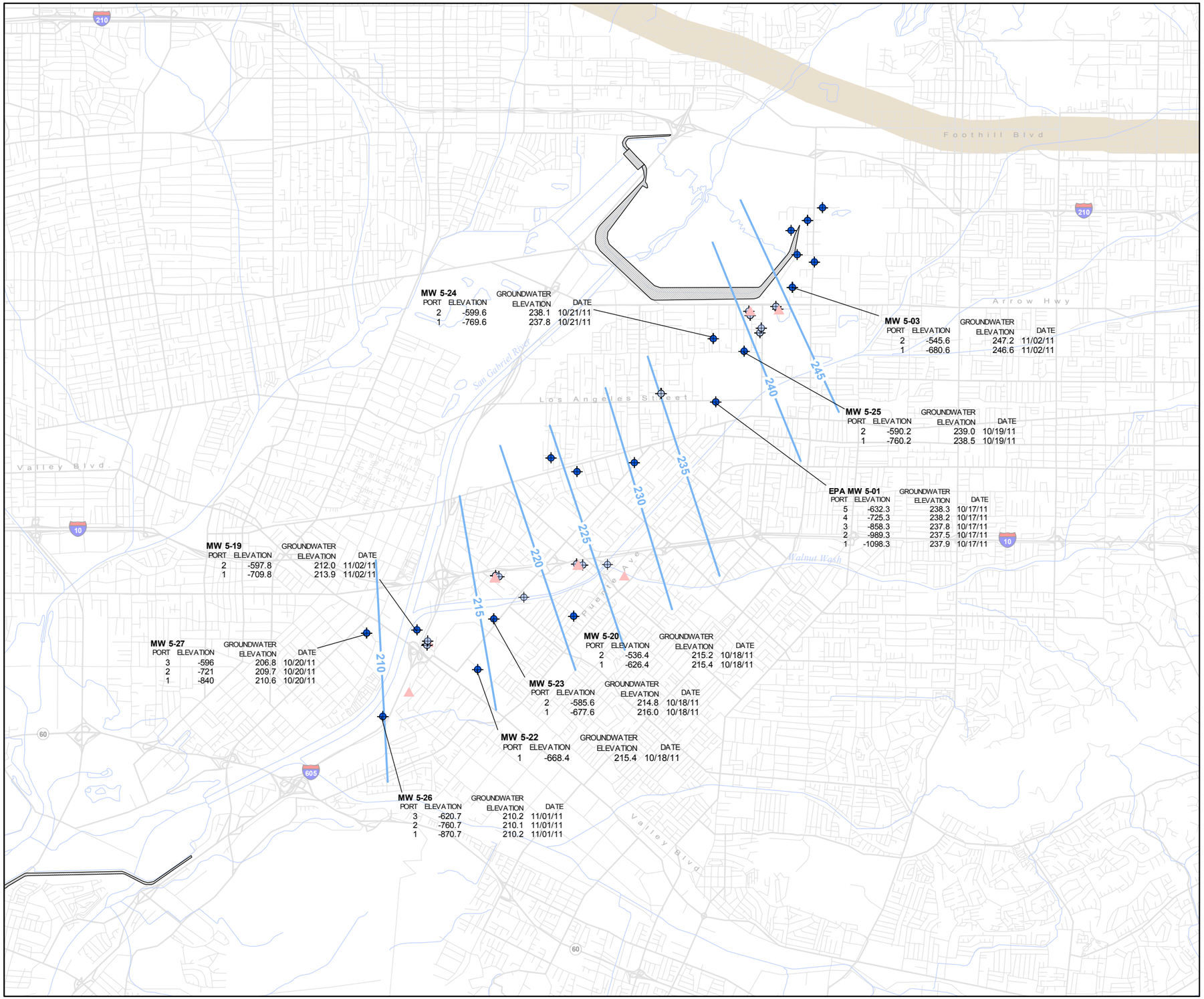
GENERALIZED OCTOBER/NOVEMBER 2011
POTENTIOMETRIC SURFACE
ABOVE -500 FEET MSL
Baldwin Park Operable Unit
San Gabriel Valley, California

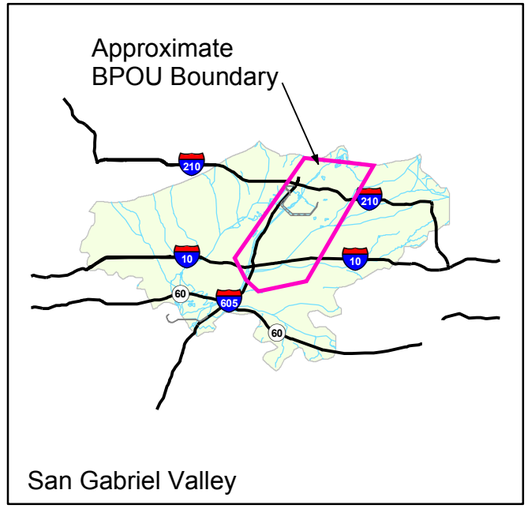
amec

Project No. 7190

Figure 5-6

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual_Report-Water_Levels\20115-06_OCTOBER_GW_Elevations_above_-500MSL.mxd





EXPLANATION

- Multiport well
- Monitoring, multiport, or production well (not included in contouring)
- Extraction well (not included in contouring)
- -215- Potentiometric surface contour (elevation in feet above mean sea level) Contour interval 5 feet
- Duarte Fault Zone

NOTES:

1. The potentiometric contours shown represent interpreted groundwater elevations based on water levels measured in the wells during October 2011 as part of the Performance Standards Evaluation Plan. The interpreted contours should not be assumed to represent the precise groundwater elevation at any point along the contour line.

5,000 0 5,000
Feet

N

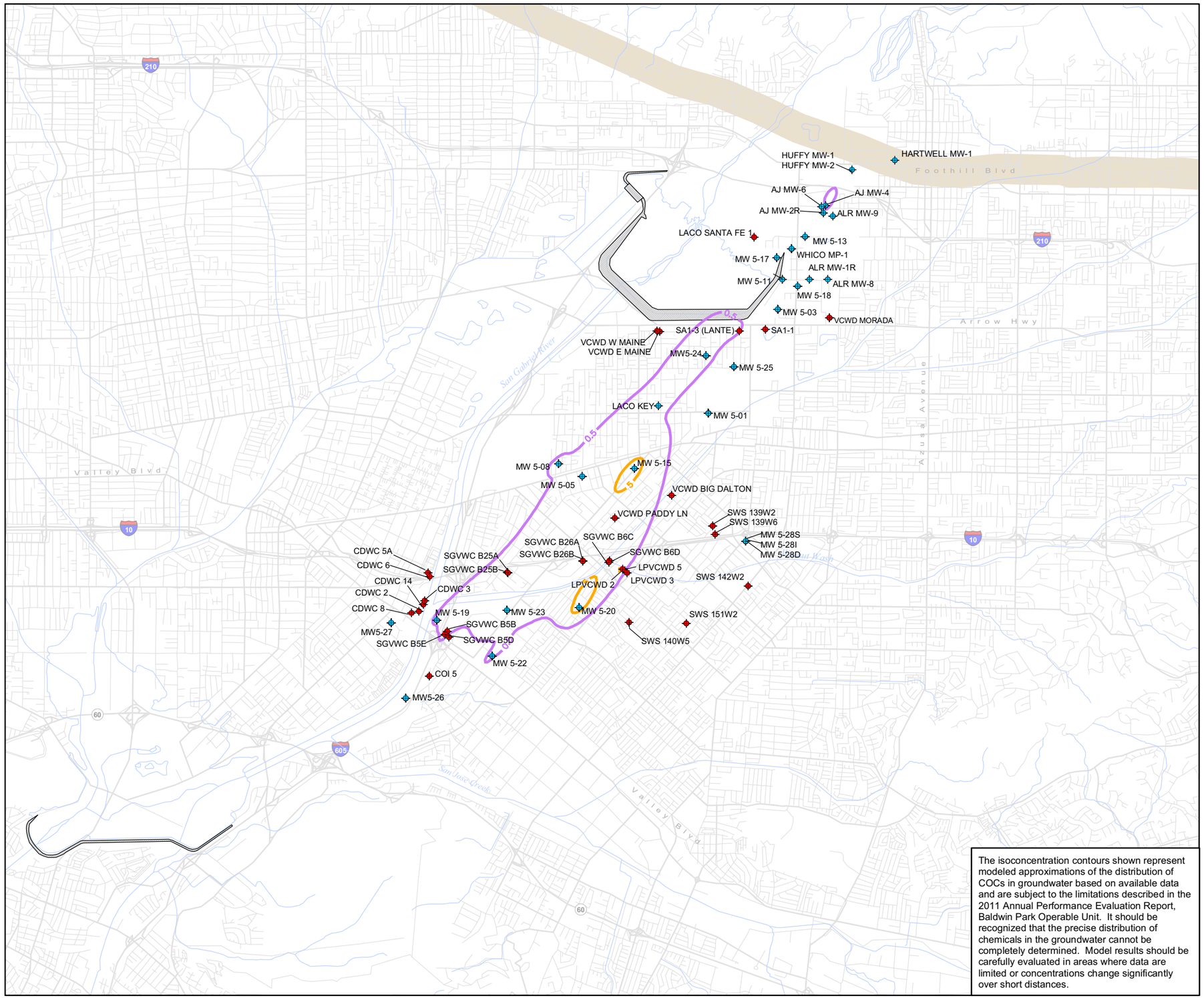
GENERALIZED OCTOBER/NOVEMBER 2011
POTENTIOMETRIC SURFACE
BELOW -500 FEET MSL
Baldwin Park Operable Unit
San Gabriel Valley, California

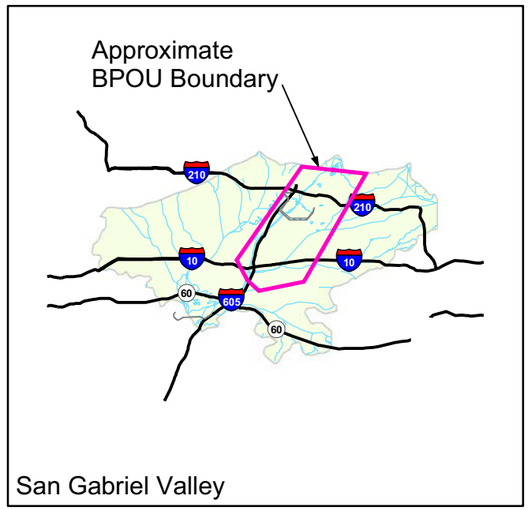
amec

Project No. 7190

Figure 5-7

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual_Report-Water_Levels\2011\5-07_OCTOBER_GW_Elevations_below_-500MSL.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 1,2-Dichloroethane isoconcentration contour (0.5 ug/L)
- 1,2-Dichloroethane isoconcentration contour (5 ug/L)
- Duarte Fault Zone

NOTES:

1. Data from the period modeled were used to create a three-dimensional isoconcentration shell of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration at all elevations.
2. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

N

5,500 0 5,500

SCALE IN FEET

The isoconcentration contours shown represent modeled approximations of the distribution of COCs in groundwater based on available data and are subject to the limitations described in the 2011 Annual Performance Evaluation Report, Baldwin Park Operable Unit. It should be recognized that the precise distribution of chemicals in the groundwater cannot be completely determined. Model results should be carefully evaluated in areas where data are limited or concentrations change significantly over short distances.

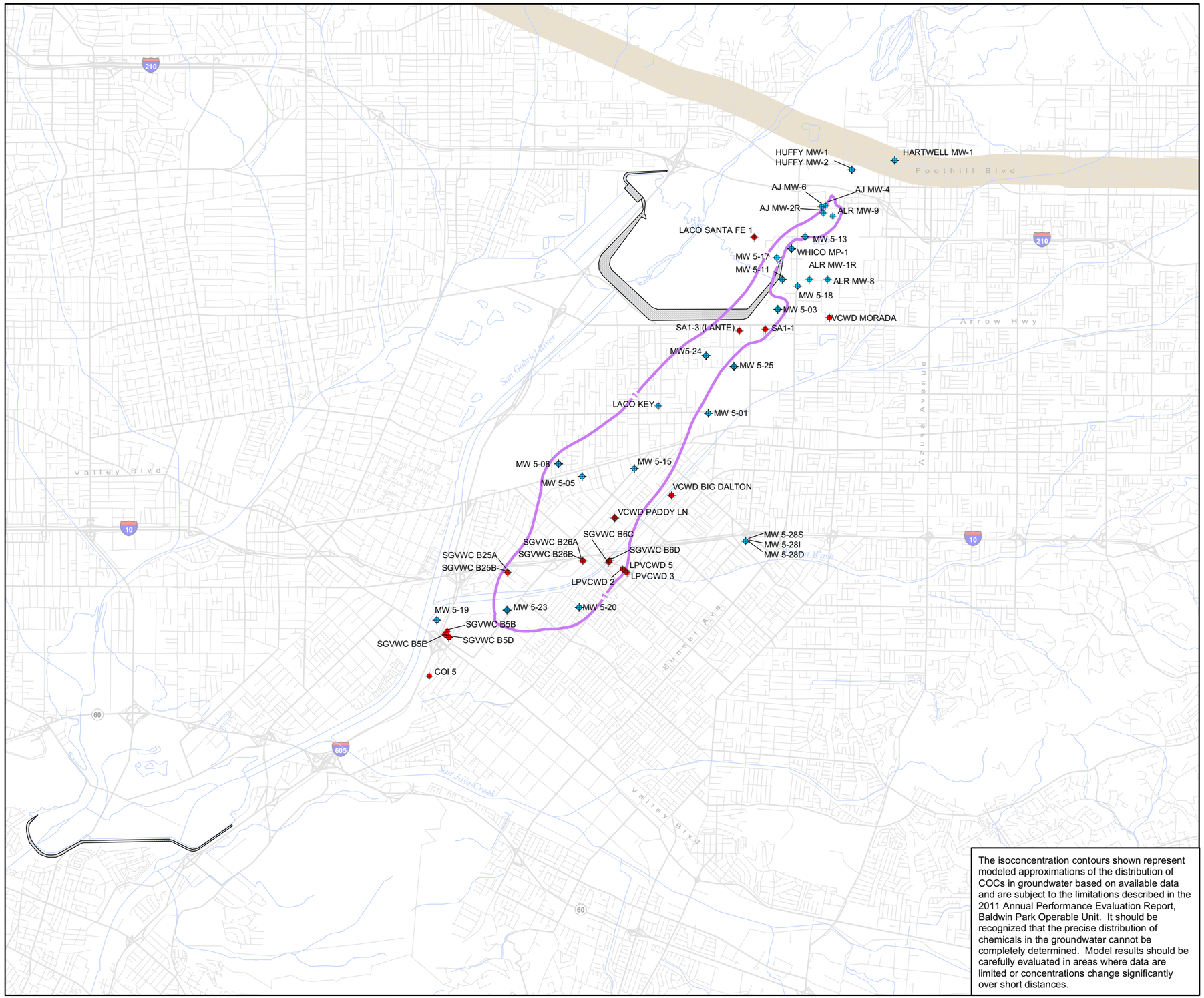
GENERALIZED DISTRIBUTION OF
1,2-DICHLOROETHANE
IN GROUNDWATER, 2011
Baldwin Park Operable Unit
San Gabriel Valley, California

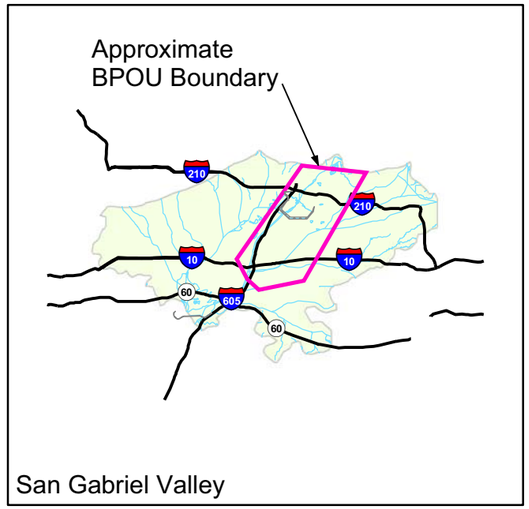
amec

Project No. 7190

Figure **5-8**

\\den-fs1\GIS\Projects\Aerojet 7190\GIS_maps\Annual Report Generalized C Distributions\201115-08_Gen_Dist_12DCA.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 1,4-Dioxane isoconcentration contour (1 ug/L)
- Duarte Fault Zone

NOTES:

1. Data from the period modeled were used to create a three-dimensional isoconcentration shell of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration at all elevations.
2. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

5,500 0 5,500

SCALE IN FEET

N

The isoconcentration contours shown represent modeled approximations of the distribution of COCs in groundwater based on available data and are subject to the limitations described in the 2011 Annual Performance Evaluation Report, Baldwin Park Operable Unit. It should be recognized that the precise distribution of chemicals in the groundwater cannot be completely determined. Model results should be carefully evaluated in areas where data are limited or concentrations change significantly over short distances.

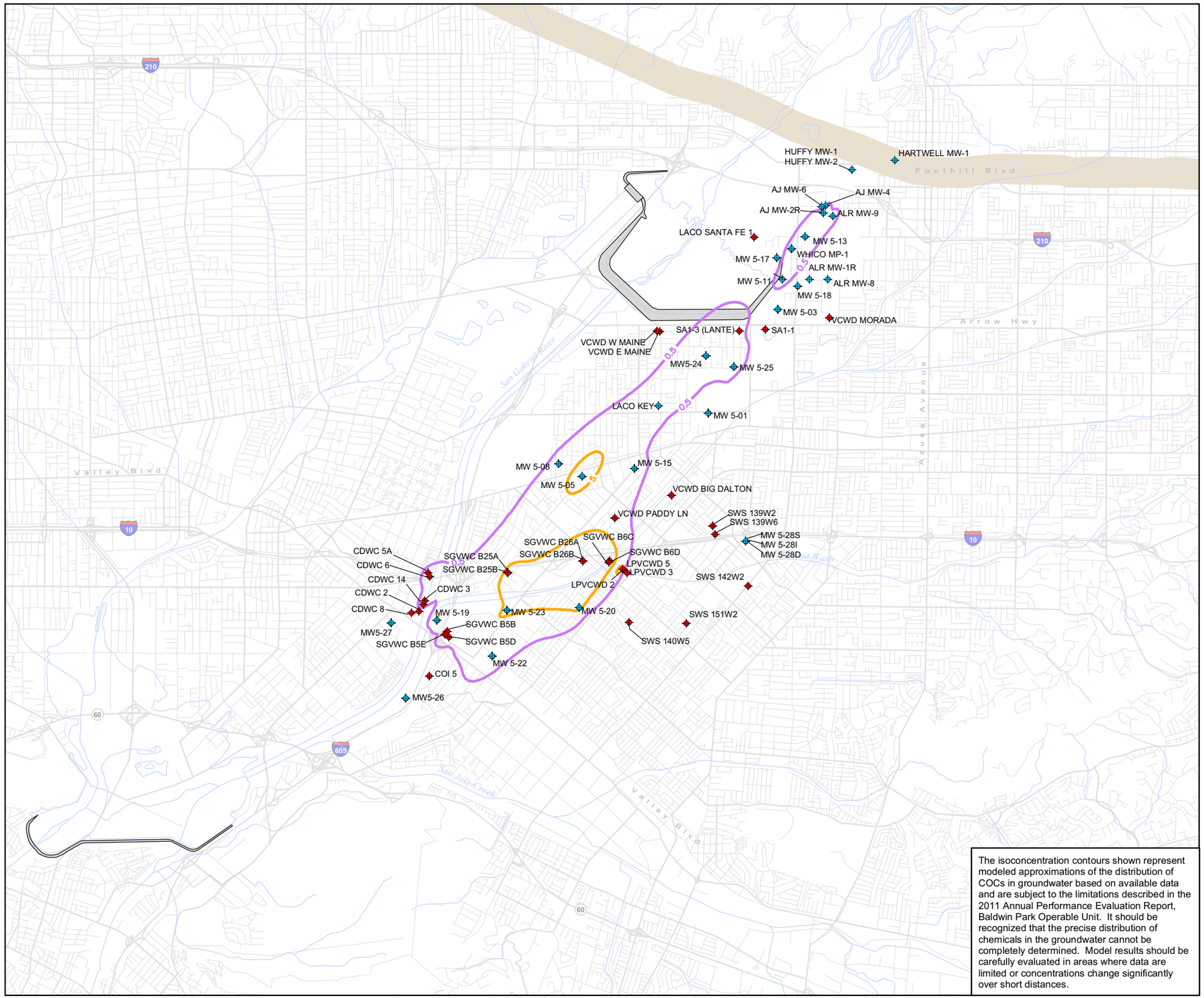
GENERALIZED DISTRIBUTION OF
1,4-DIOXANE
IN GROUNDWATER, 2011
Baldwin Park Operable Unit
San Gabriel Valley, California

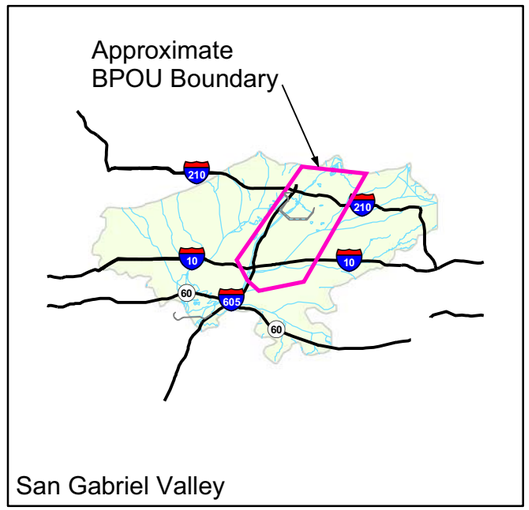
amec

Project No. 7190

Figure **5-9**

\\den-fs1\GIS\Projects\Aerojet 7190\GIS_maps\Annual Report Generalized C Distributions\201115-09_Gen_Dist_14Dioxane.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- Carbon tetrachloride isoconcentration contour (0.5 ug/L)
- Carbon tetrachloride isoconcentration contour (5 ug/L)
- Duarte Fault Zone

NOTES:

1. Data from the period modeled were used to create a three-dimensional isoconcentration shell of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration at all elevations.
2. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

5,500 0 5,500

SCALE IN FEET

N

The isoconcentration contours shown represent modeled approximations of the distribution of COCs in groundwater based on available data and are subject to the limitations described in the 2011 Annual Performance Evaluation Report, Baldwin Park Operable Unit. It should be recognized that the precise distribution of chemicals in the groundwater cannot be completely determined. Model results should be carefully evaluated in areas where data are limited or concentrations change significantly over short distances.

GENERALIZED DISTRIBUTION OF CARBON TETRACHLORIDE IN GROUNDWATER, 2011

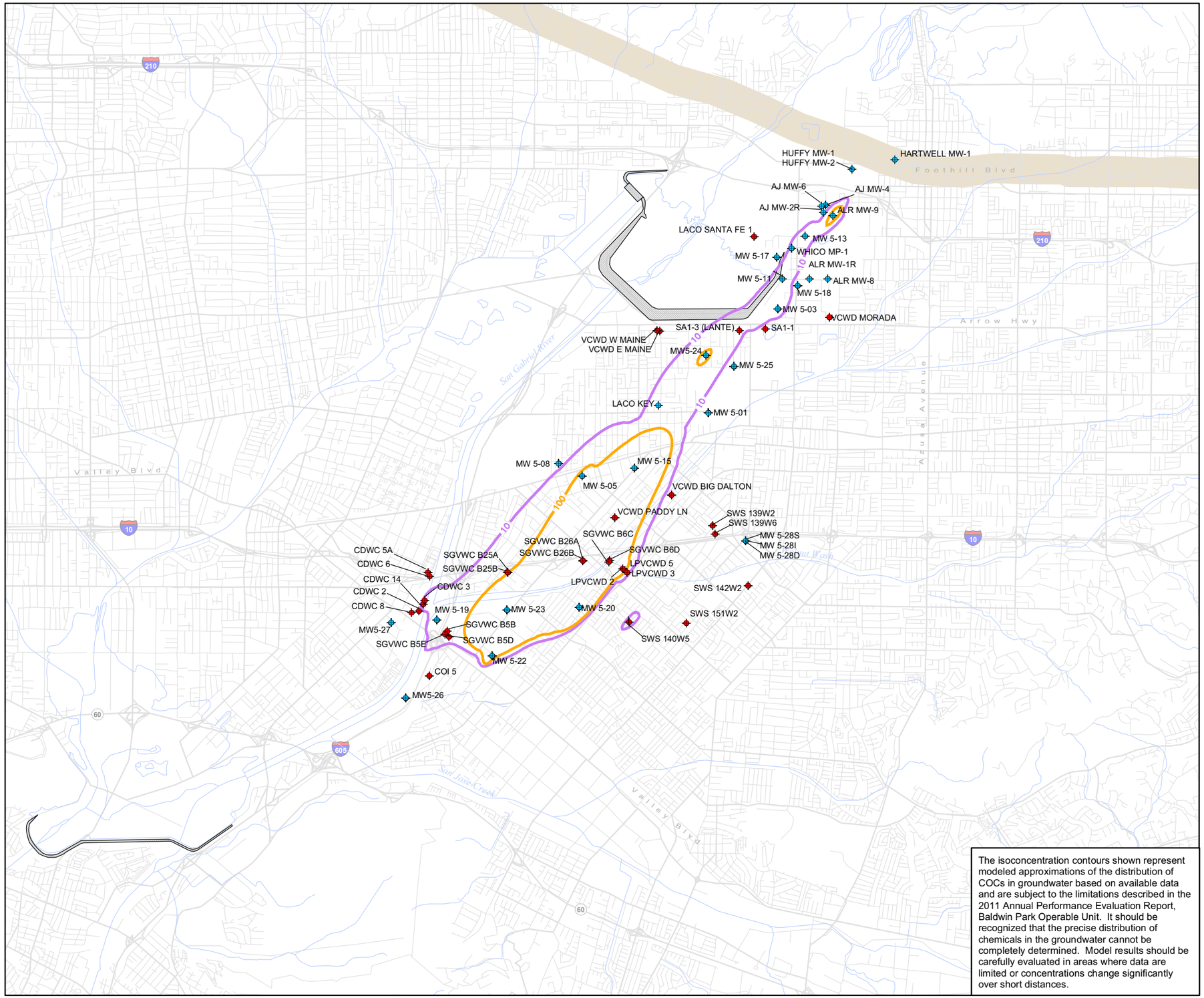
Baldwin Park Operable Unit
San Gabriel Valley, California

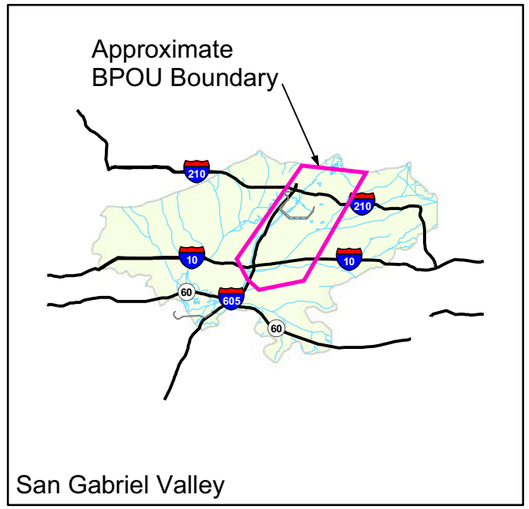
amec

Project No. 7190

Figure **5-10**

\\den-fs1\GIS\Projects\Aerojet 7190\GIS_maps\Annual Report Generalized C Distributions\201115-10_Gen_Dist_CTC.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- N-Nitrosodimethylamine isoconcentration contour (10 ng/L)
- N-Nitrosodimethylamine isoconcentration contour (100 ng/L)
- Duarte Fault Zone

NOTES:

1. Data from the period modeled were used to create a three-dimensional isoconcentration shell of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration at all elevations.
2. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

5,500 0 5,500

SCALE IN FEET

N

The isoconcentration contours shown represent modeled approximations of the distribution of COCs in groundwater based on available data and are subject to the limitations described in the 2011 Annual Performance Evaluation Report, Baldwin Park Operable Unit. It should be recognized that the precise distribution of chemicals in the groundwater cannot be completely determined. Model results should be carefully evaluated in areas where data are limited or concentrations change significantly over short distances.

GENERALIZED DISTRIBUTION OF
N-NITROSODIMETHYLAMINE
IN GROUNDWATER, 2011

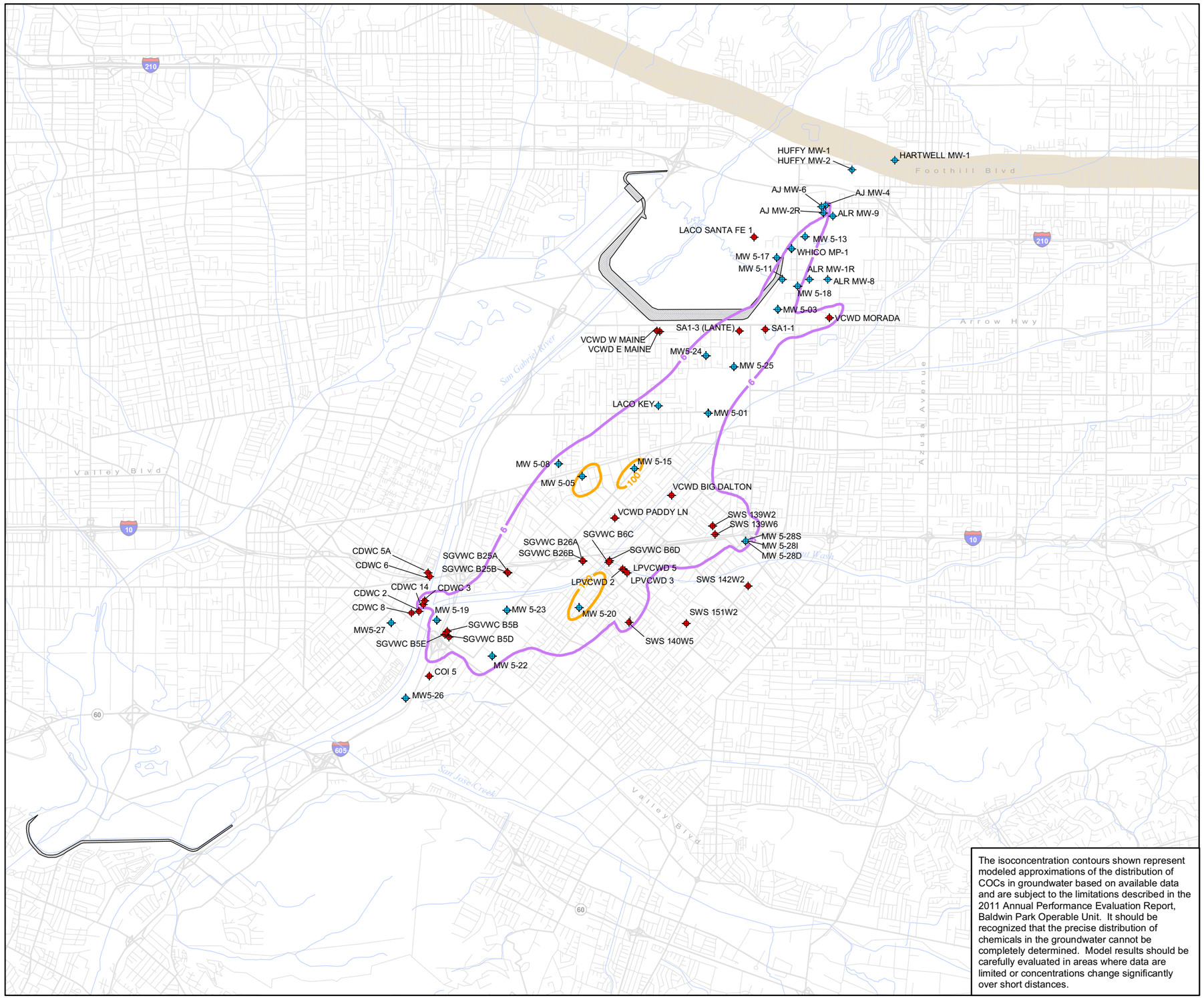
Baldwin Park Operable Unit
San Gabriel Valley, California

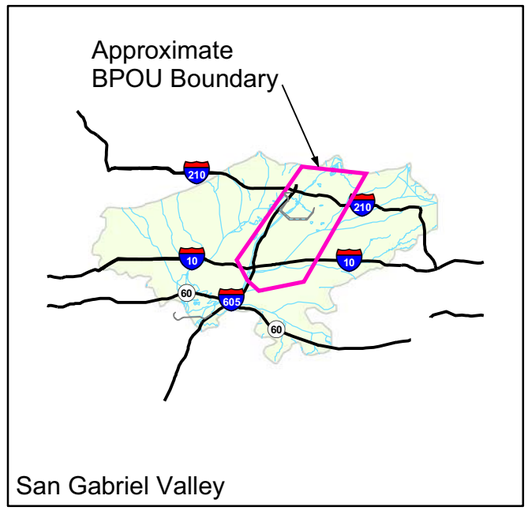
amec

Project No. 7190

Figure **5-11**

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual Report Generalized C Distributions\201115-11_Gen_Dist_NDMA.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- Perchlorate isoconcentration contour (6 ug/L)
- Perchlorate isoconcentration contour (100 ug/L)
- Duarte Fault Zone

NOTES:

1. Data from the period modeled were used to create a three-dimensional isoconcentration shell of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration at all elevations.
2. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

5,500 0 5,500

SCALE IN FEET

N

The isoconcentration contours shown represent modeled approximations of the distribution of COCs in groundwater based on available data and are subject to the limitations described in the 2011 Annual Performance Evaluation Report, Baldwin Park Operable Unit. It should be recognized that the precise distribution of chemicals in the groundwater cannot be completely determined. Model results should be carefully evaluated in areas where data are limited or concentrations change significantly over short distances.

GENERALIZED DISTRIBUTION OF PERCHLORATE IN GROUNDWATER, 2011

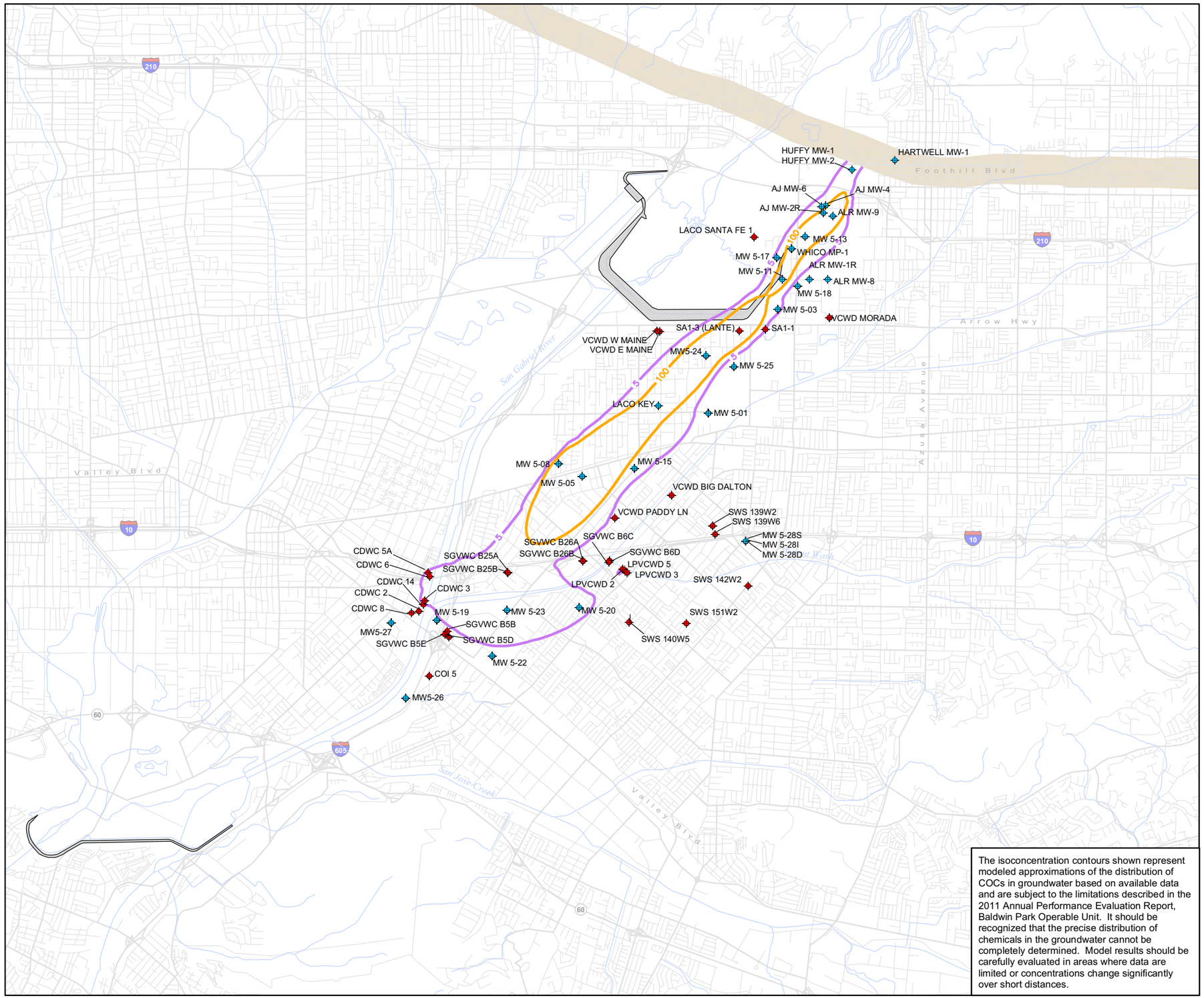
Baldwin Park Operable Unit
San Gabriel Valley, California

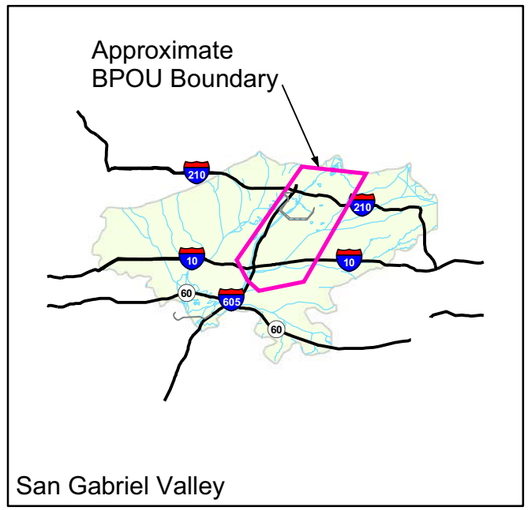
amec

Project No. 7190

Figure **5-12**

\\den-fs1\GIS\Projects\Aerojet 7190\GIS_maps\Annual Report Generalized C Distributions\201115-12 Gen Dist Perchlorate.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- Tetrachloroethene isoconcentration contour (5 ug/L)
- Tetrachloroethene isoconcentration contour (100 ug/L)
- Duarte Fault Zone

NOTES:

1. Data from the period modeled were used to create a three-dimensional isoconcentration shell of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration at all elevations.
2. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

N

5,500 0 5,500

SCALE IN FEET

The isoconcentration contours shown represent modeled approximations of the distribution of COCs in groundwater based on available data and are subject to the limitations described in the 2011 Annual Performance Evaluation Report, Baldwin Park Operable Unit. It should be recognized that the precise distribution of chemicals in the groundwater cannot be completely determined. Model results should be carefully evaluated in areas where data are limited or concentrations change significantly over short distances.

GENERALIZED DISTRIBUTION OF TETRACHLOROETHENE IN GROUNDWATER, 2011

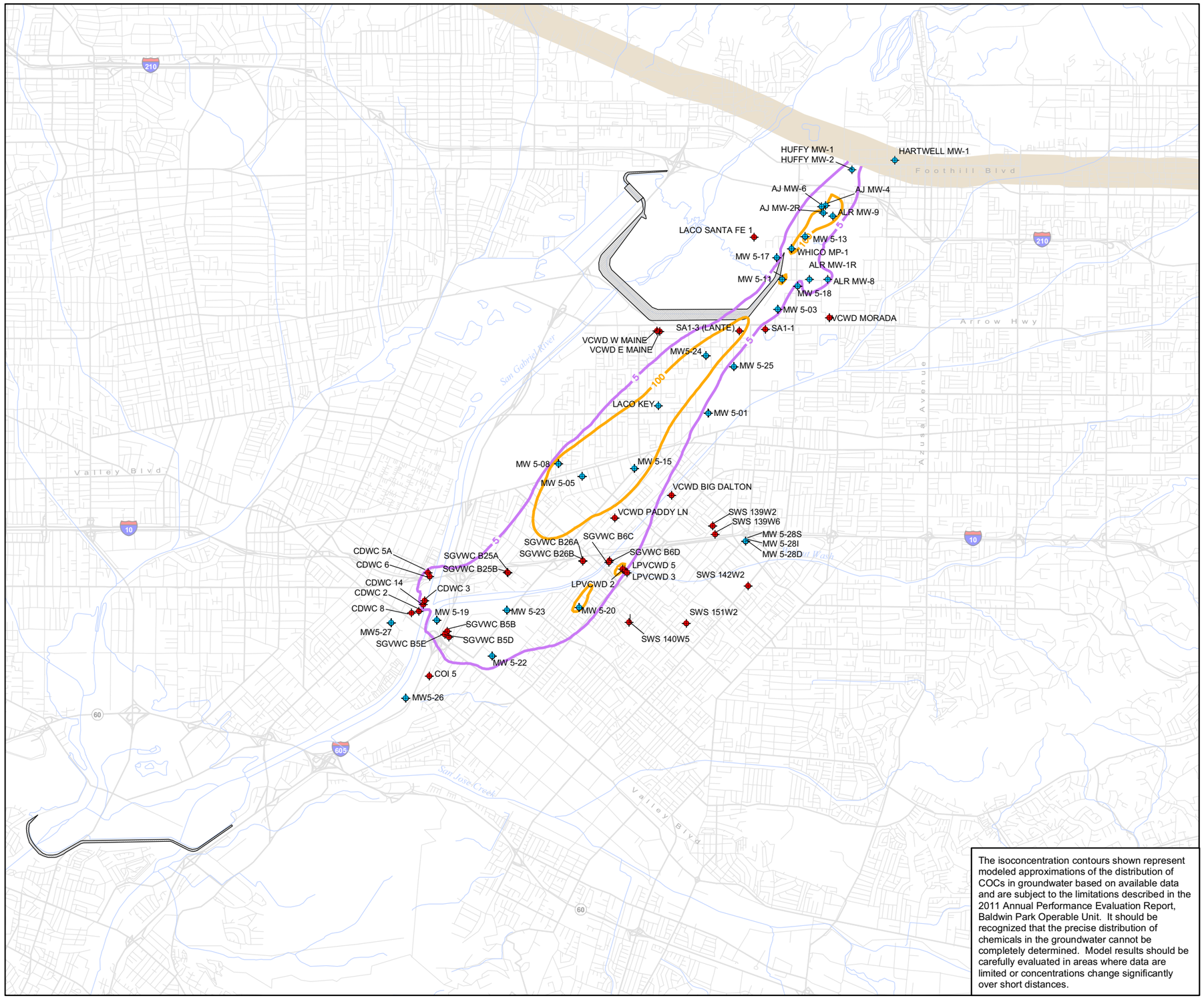
Baldwin Park Operable Unit
San Gabriel Valley, California

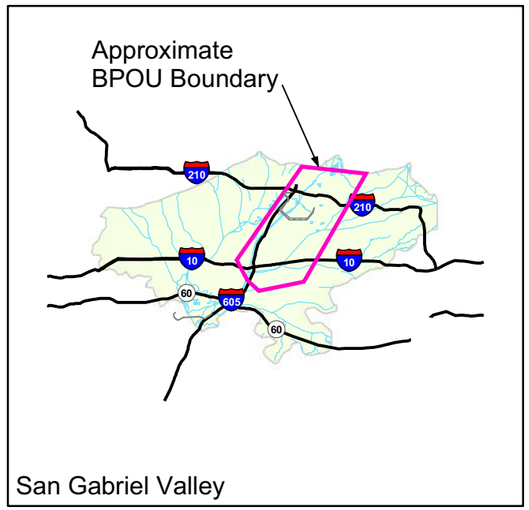
amec

Project No. 7190

Figure **5-13**

\\den-fs1\GIS\Projects\Aerojet 7190\GIS_maps\Annual Report Generalized C Distributions\201115-13_Gen_Dist_PCE.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- Trichloroethene isoconcentration contour (5 ug/L)
- Trichloroethene isoconcentration contour (100 ug/L)
- Duarte Fault Zone

NOTES:

1. Data from the period modeled were used to create a three-dimensional isoconcentration shell of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration at all elevations.
2. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

5,500 0 5,500

SCALE IN FEET

N

The isoconcentration contours shown represent modeled approximations of the distribution of COCs in groundwater based on available data and are subject to the limitations described in the 2011 Annual Performance Evaluation Report, Baldwin Park Operable Unit. It should be recognized that the precise distribution of chemicals in the groundwater cannot be completely determined. Model results should be carefully evaluated in areas where data are limited or concentrations change significantly over short distances.

GENERALIZED DISTRIBUTION OF TRICHLOROETHENE IN GROUNDWATER, 2011

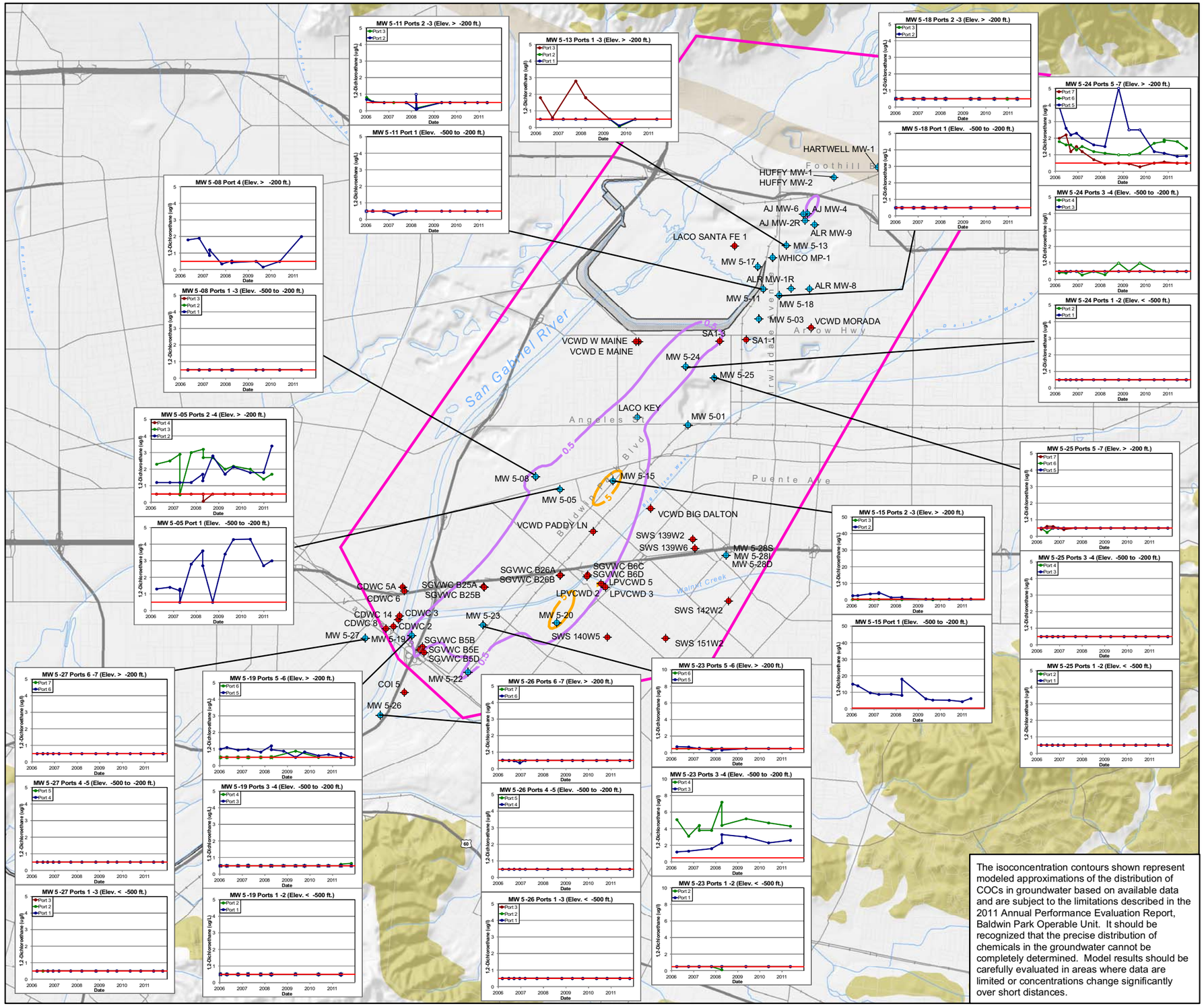
Baldwin Park Operable Unit
San Gabriel Valley, California

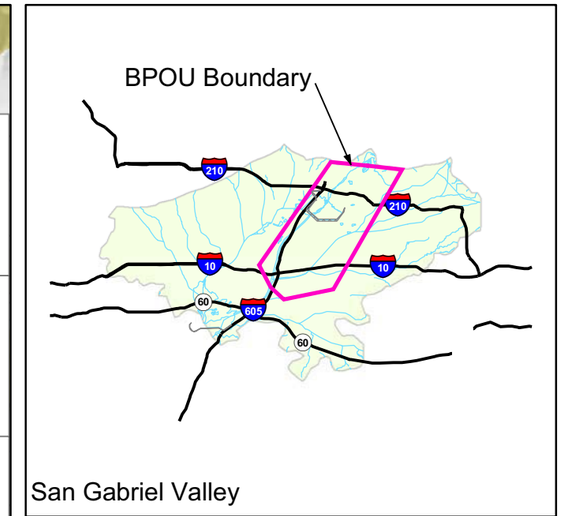
amec

Project No. 7190

Figure **5-14**

\\den-fs1\GIS\Projects\Aerojet 7190\GIS_maps\Annual Report Generalized C Distributions\201115-14_Gen_Dist_TCE.mxd





Explanation

- Extraction or Production Well
- Monitoring or Multiport Well
- BPOU Boundary
- 1,2-Dichloroethane isoconcentration contour (0.5 ug/L)
- 1,2-Dichloroethane isoconcentration contour (5 ug/L)
- Duarte Fault Zone

Horizontal red line on each graph represents the MCL of 0.5 ug/L

NOTES:

1. Data from the period modeled were used to create a three-dimensional isoconcentration shell of the contaminant. This map represents the maximum extent of contours of equal concentration at all elevations.
2. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision.

5,000 0 5,000

SCALE IN FEET

N

The isoconcentration contours shown represent modeled approximations of the distribution of COCs in groundwater based on available data and are subject to the limitations described in the 2011 Annual Performance Evaluation Report, Baldwin Park Operable Unit. It should be recognized that the precise distribution of chemicals in the groundwater cannot be completely determined. Model results should be carefully evaluated in areas where data are limited or concentrations change significantly over short distances.

TIME-CONCENTRATION TRENDS FOR 1,2-DICHLOROETHANE IN GROUNDWATER, 2011

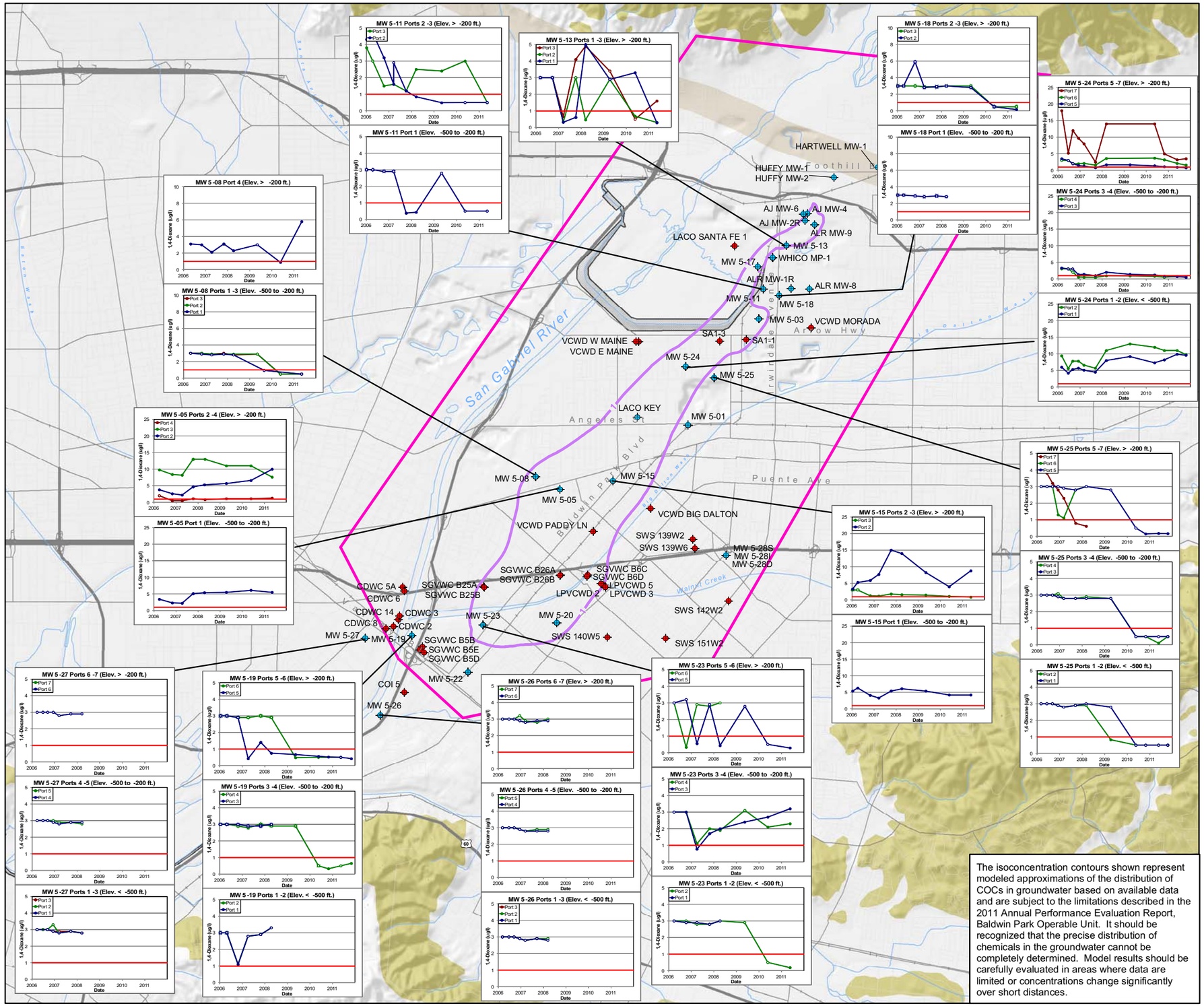
Baldwin Park Operable Unit
San Gabriel Valley, California

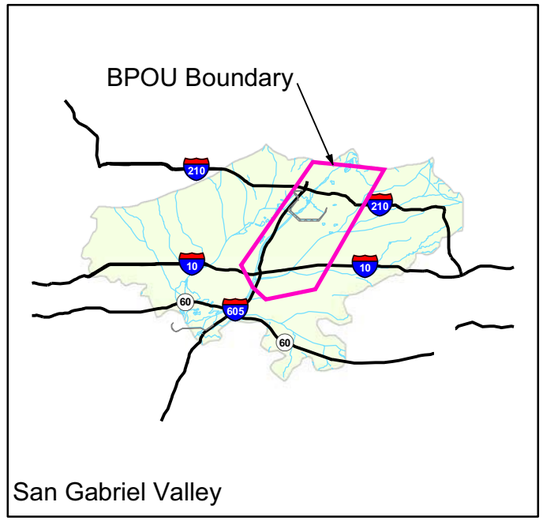
amec

Project No. 7190

Figure **5-15**

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual Report TvsC\2011\5-15_5yr_12-DCA_TvC.mxd





Explanation

- Extraction or Production Well
- Monitoring or Multiport Well
- BPOU Boundary
- 1,4-Dioxane isoconcentration contour (1 ug/L)
- Duarte Fault Zone

Horizontal red line on each graph represents the MCL of 1 ug/L

NOTES:

1. Data from the period modeled were used to create a three-dimensional isoconcentration shell of the contaminant. This map represents the maximum extent of contours of equal concentration at all elevations.
2. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision.

5,000 0 5,000

SCALE IN FEET

N

The isoconcentration contours shown represent modeled approximations of the distribution of COCs in groundwater based on available data and are subject to the limitations described in the 2011 Annual Performance Evaluation Report, Baldwin Park Operable Unit. It should be recognized that the precise distribution of chemicals in the groundwater cannot be completely determined. Model results should be carefully evaluated in areas where data are limited or concentrations change significantly over short distances.

TIME-CONCENTRATION TRENDS FOR 1,4-DIOXANE IN GROUNDWATER, 2011

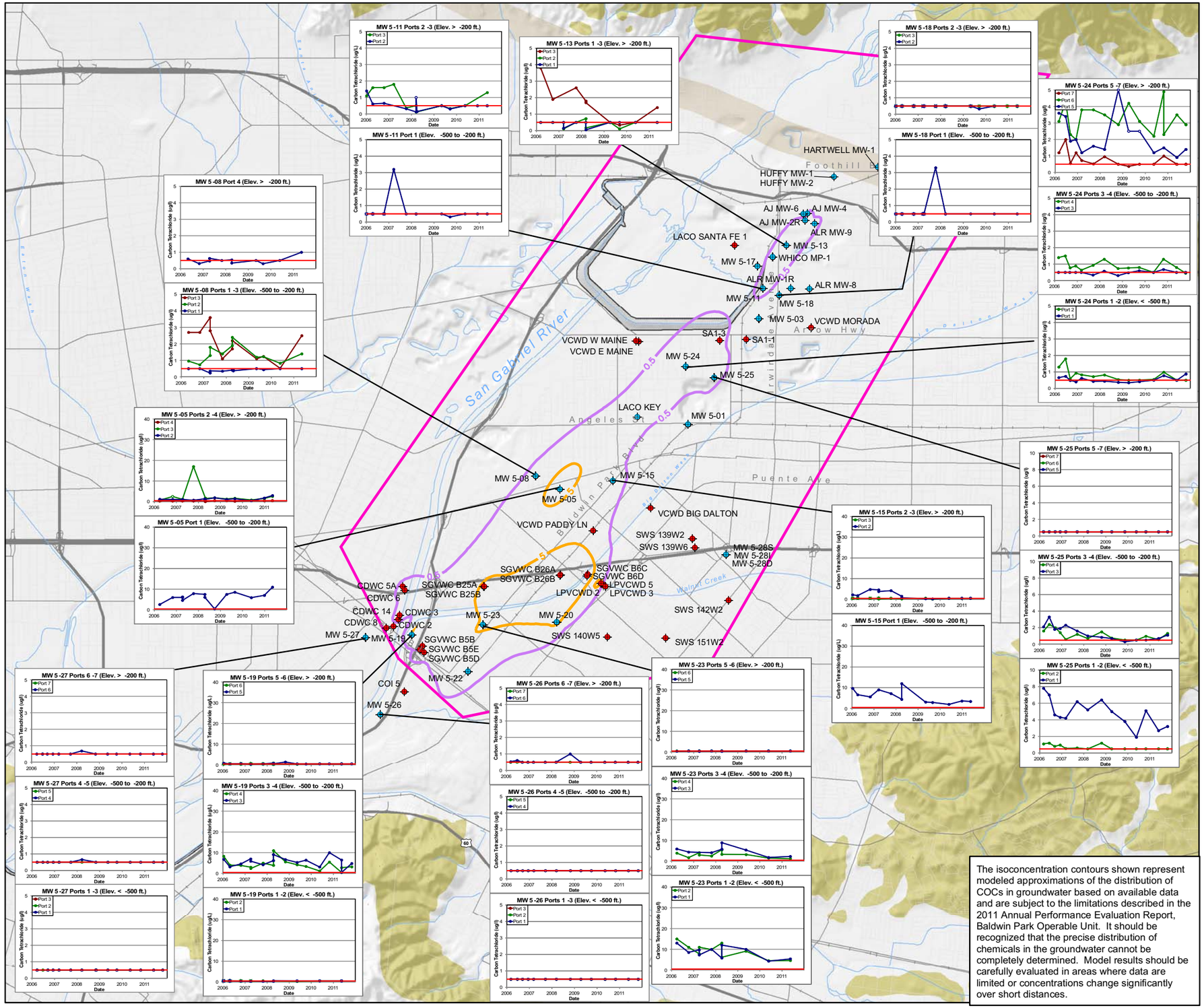
Baldwin Park Operable Unit
San Gabriel Valley, California

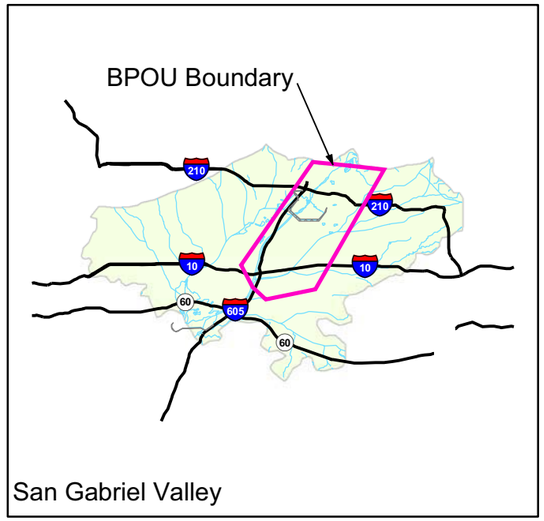
amec

Project No. 7190

Figure 5-16

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual Report TvsC\201115-16_5yr_14-DIOX_TvC.mxd





Explanation

- Extraction or Production Well
- Monitoring or Multiport Well
- BPOU Boundary
- Carbon tetrachloride isoconcentration contour (0.5 ug/L)
- Carbon tetrachloride isoconcentration contour (5 ug/L)
- Duarte Fault Zone

Horizontal red line on each graph represents the MCL of 0.5 ug/L

NOTES:

1. Data from the period modeled were used to create a three-dimensional isoconcentration shell of the contaminant. This map represents the maximum extent of contours of equal concentration at all elevations.
2. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision.

5,000 0 5,000

SCALE IN FEET

N

The isoconcentration contours shown represent modeled approximations of the distribution of COCs in groundwater based on available data and are subject to the limitations described in the 2011 Annual Performance Evaluation Report, Baldwin Park Operable Unit. It should be recognized that the precise distribution of chemicals in the groundwater cannot be completely determined. Model results should be carefully evaluated in areas where data are limited or concentrations change significantly over short distances.

TIME-CONCENTRATION TRENDS FOR CARBON TETRACHLORIDE IN GROUNDWATER, 2011

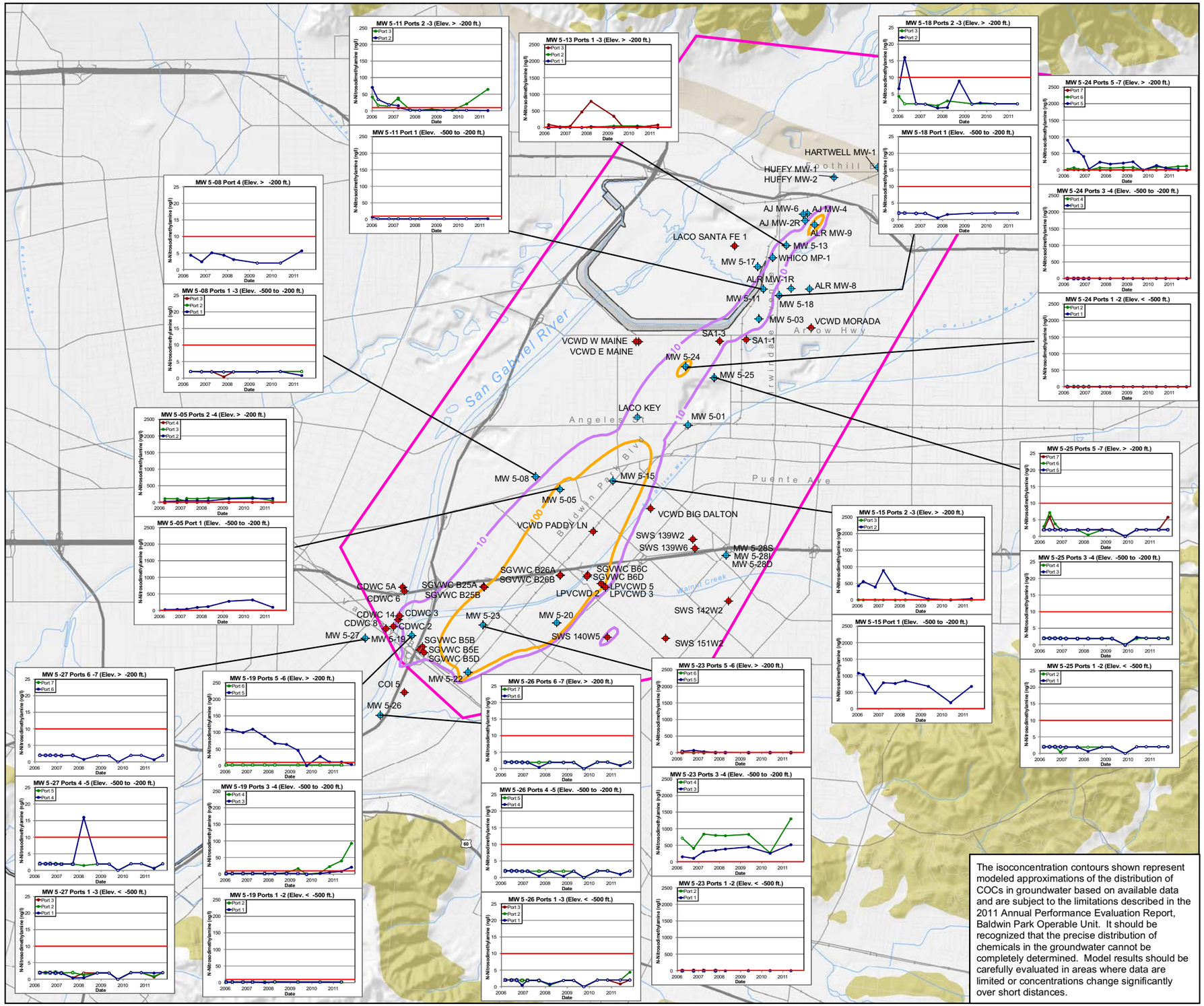
Baldwin Park Operable Unit
San Gabriel Valley, California

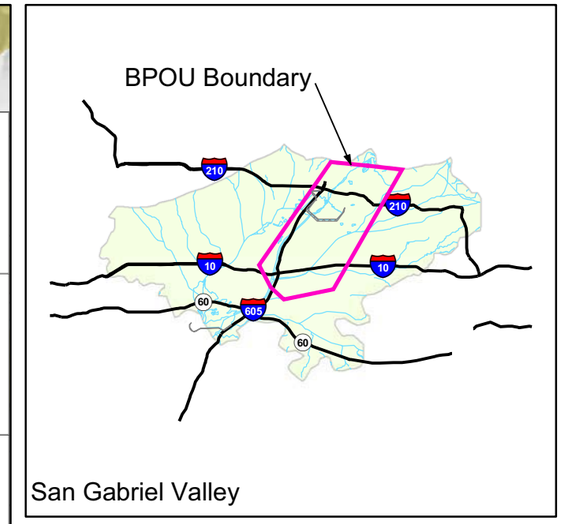
amec

Project No. 7190

Figure **5-17**

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual Report TvsC\2011\5-17_5yr_CTC_TvC.mxd





Explanation

- Extraction or Production Well
- Monitoring or Multiport Well
- BPOU Boundary
- N-nitrosodimethylamine isoconcentration contour (10 ng/L)
- N-nitrosodimethylamine isoconcentration contour (100 ng/L)
- Duarte Fault Zone

Horizontal red line on each graph represents the NL of 10 ng/L

NOTES:

1. Data from the period modeled were used to create a three-dimensional isoconcentration shell of the contaminant. This map represents the maximum extent of contours of equal concentration at all elevations.
2. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision.

5,000 0 5,000

SCALE IN FEET

N

The isoconcentration contours shown represent modeled approximations of the distribution of COCs in groundwater based on available data and are subject to the limitations described in the 2011 Annual Performance Evaluation Report, Baldwin Park Operable Unit. It should be recognized that the precise distribution of chemicals in the groundwater cannot be completely determined. Model results should be carefully evaluated in areas where data are limited or concentrations change significantly over short distances.

TIME-CONCENTRATION TRENDS FOR N-NITROSODIMETHYLAMINE IN GROUNDWATER, 2011

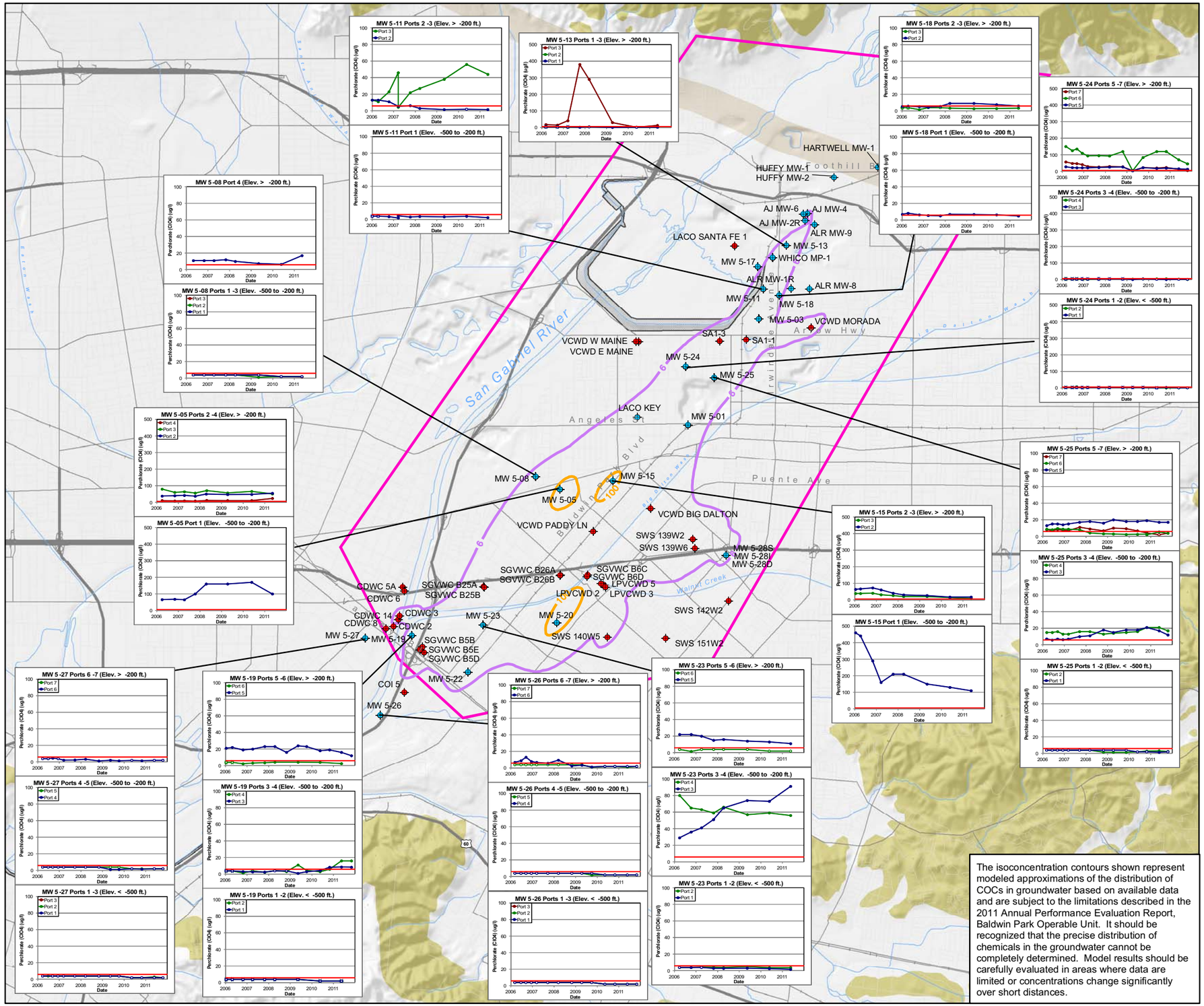
Baldwin Park Operable Unit
San Gabriel Valley, California

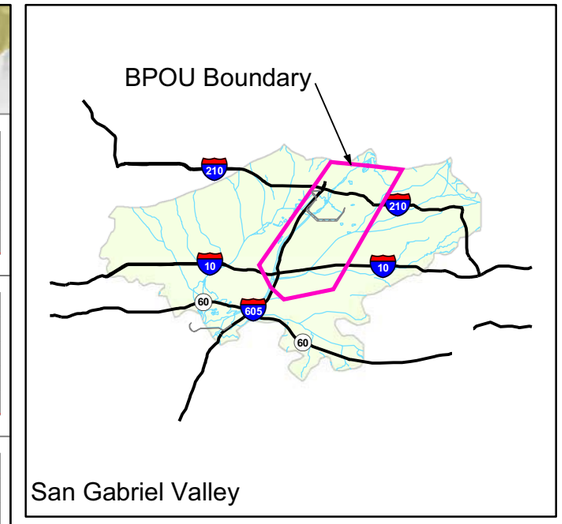
amec

Project No. 7190

Figure **5-18**

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual Report TvsC\2011\5-18_5yr_NDMA_TvC.mxd





Explanation

- Extraction or Production Well
- Monitoring or Multiport Well
- BPOU Boundary
- Perchlorate isoconcentration contour (6 ug/L)
- Perchlorate isoconcentration contour (100 ug/L)
- Duarte Fault Zone

Horizontal red line on each graph represents the MCL of 6 ug/L

NOTES:

1. Data from the period modeled were used to create a three-dimensional isoconcentration shell of the contaminant. This map represents the maximum extent of contours of equal concentration at all elevations.
2. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision.

5,000 0 5,000

SCALE IN FEET

N

The isoconcentration contours shown represent modeled approximations of the distribution of COCs in groundwater based on available data and are subject to the limitations described in the 2011 Annual Performance Evaluation Report, Baldwin Park Operable Unit. It should be recognized that the precise distribution of chemicals in the groundwater cannot be completely determined. Model results should be carefully evaluated in areas where data are limited or concentrations change significantly over short distances.

TIME-CONCENTRATION TRENDS FOR PERCHLORATE IN GROUNDWATER, 2011

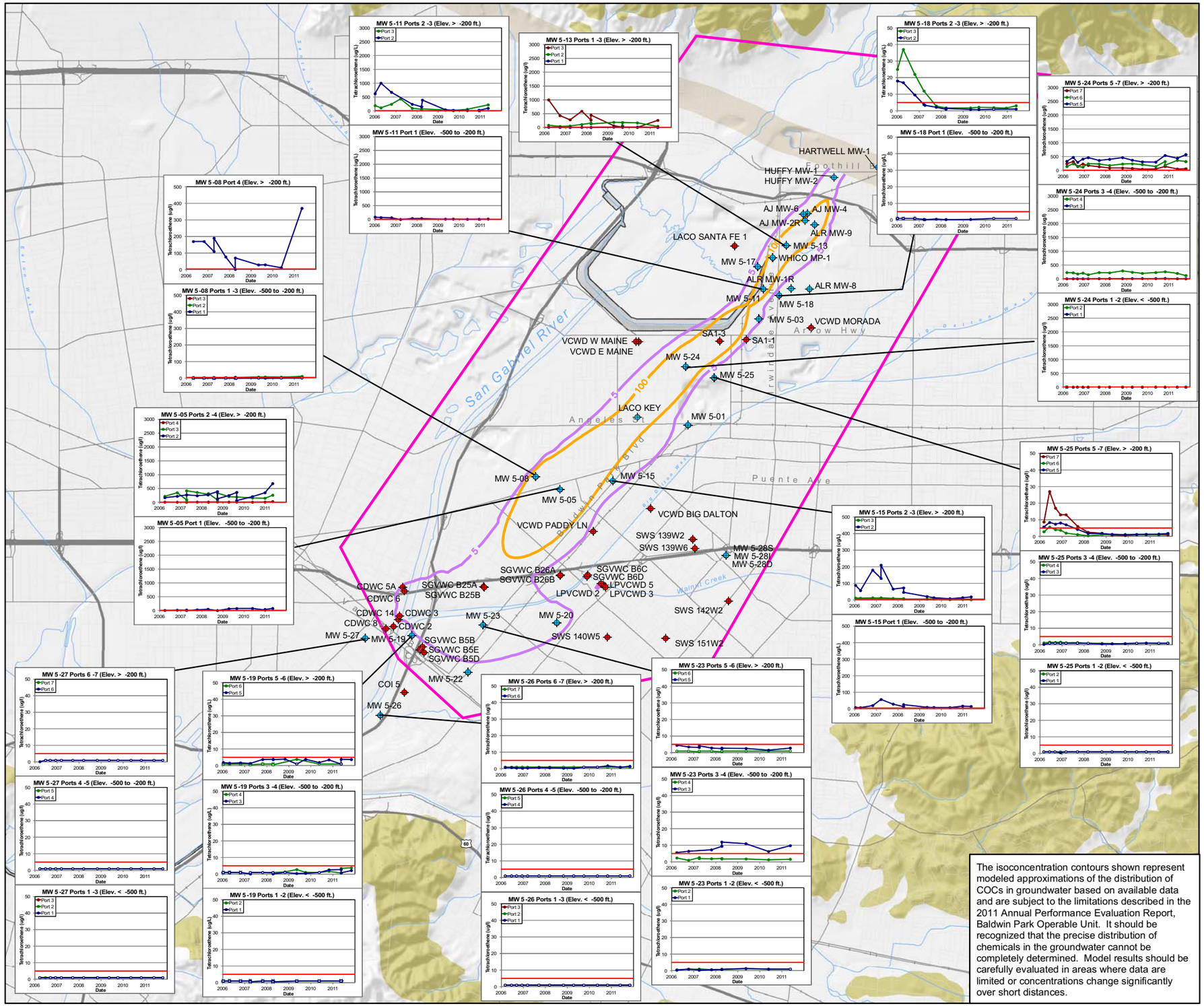
Baldwin Park Operable Unit
San Gabriel Valley, California

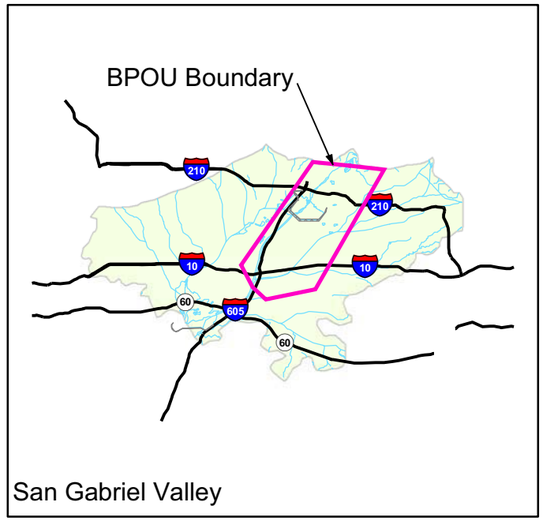
amec

Project No. 7190

Figure **5-19**

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual Report TvsC\2011\5-19_5yr_Perchlorate_TvC.mxd





Explanation

- Extraction or Production Well
- Monitoring or Multiport Well
- BPOU Boundary
- Tetrachloroethene isoconcentration contour (5 ug/L)
- Tetrachloroethene isoconcentration contour (100 ug/L)
- Duarte Fault Zone

Horizontal red line on each graph represents the MCL of 5 ug/L

NOTES:

1. Data from the period modeled were used to create a three-dimensional isoconcentration shell of the contaminant. This map represents the maximum extent of contours of equal concentration at all elevations.
2. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision.

5,000 0 5,000

SCALE IN FEET

N

The isoconcentration contours shown represent modeled approximations of the distribution of COCs in groundwater based on available data and are subject to the limitations described in the 2011 Annual Performance Evaluation Report, Baldwin Park Operable Unit. It should be recognized that the precise distribution of chemicals in the groundwater cannot be completely determined. Model results should be carefully evaluated in areas where data are limited or concentrations change significantly over short distances.

TIME-CONCENTRATION TRENDS FOR TETRACHLOROETHENE IN GROUNDWATER, 2011

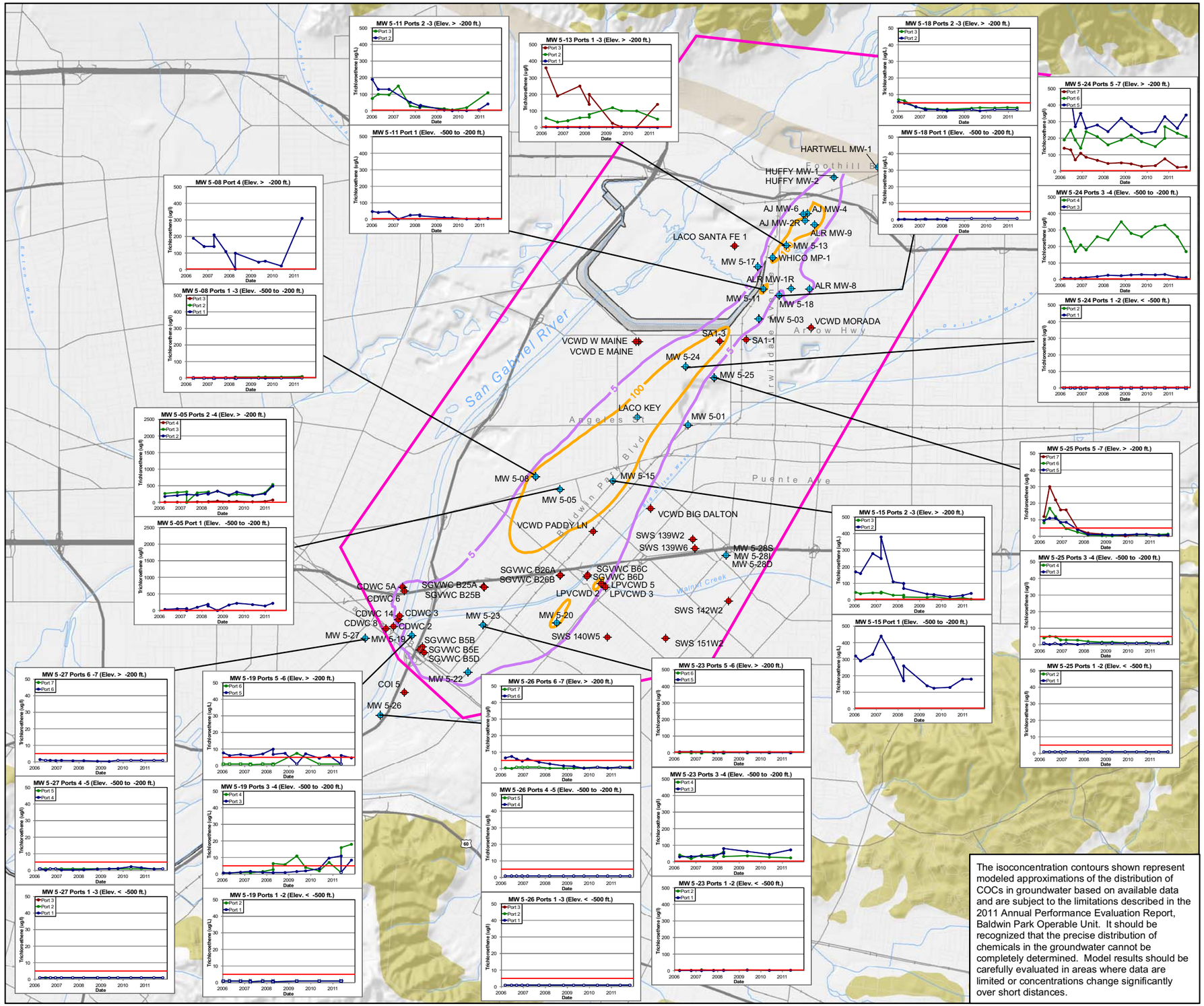
Baldwin Park Operable Unit
San Gabriel Valley, California

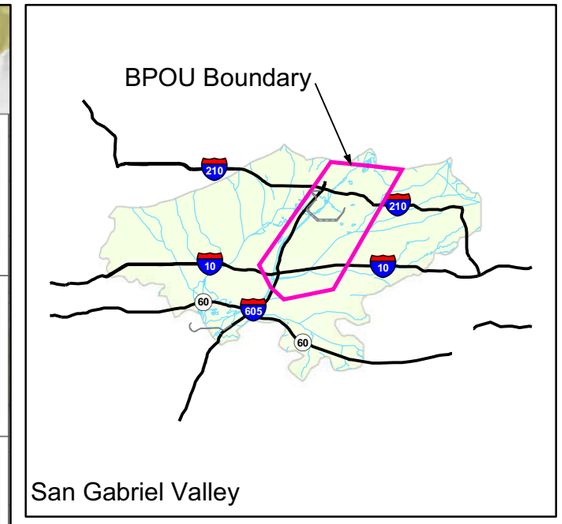
amec

Project No. 7190

Figure **5-20**

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual Report TvsC\201115-20_5yr_PCE_TvC.mxd





Explanation

- Extraction or Production Well
- Monitoring or Multiport Well
- BPOU Boundary
- Trichloroethene isoconcentration contour (5 ug/L)
- Trichloroethene isoconcentration contour (100 ug/L)
- Duarte Fault Zone

Horizontal red line on each graph represents the MCL of 5 ug/L

NOTES:

1. Data from the period modeled were used to create a three-dimensional isoconcentration shell of the contaminant. This map represents the maximum extent of contours of equal concentration at all elevations.
2. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision.

5,000 0 5,000

SCALE IN FEET

N

The isoconcentration contours shown represent modeled approximations of the distribution of COCs in groundwater based on available data and are subject to the limitations described in the 2011 Annual Performance Evaluation Report, Baldwin Park Operable Unit. It should be recognized that the precise distribution of chemicals in the groundwater cannot be completely determined. Model results should be carefully evaluated in areas where data are limited or concentrations change significantly over short distances.

TIME-CONCENTRATION TRENDS FOR TRICHLOROETHENE IN GROUNDWATER, 2011

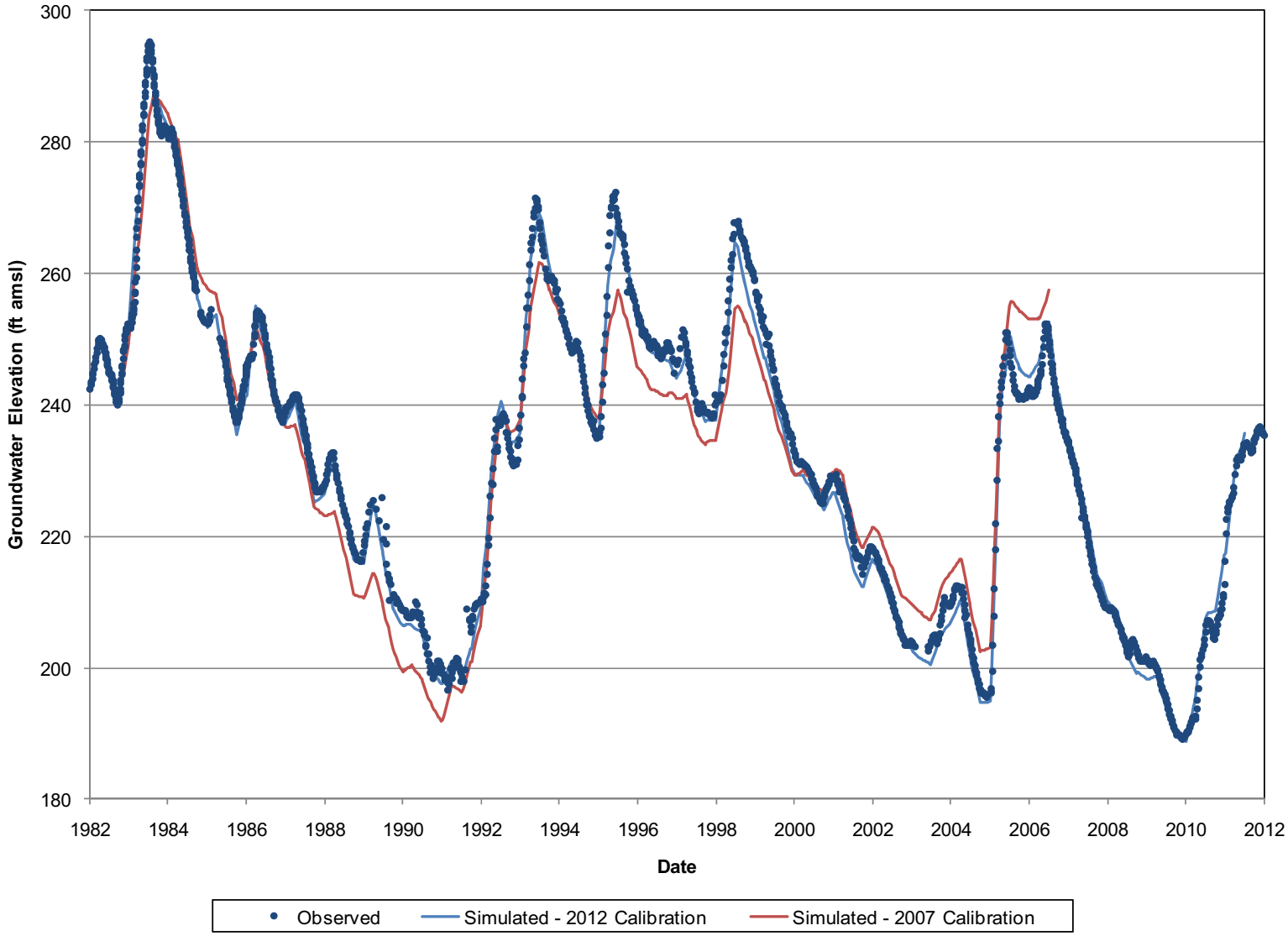
Baldwin Park Operable Unit
San Gabriel Valley, California

amec

Project No. 7190

Figure 5-21

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual Report TvsC\2011\5-21_5yr_TCE_TvC.mxd

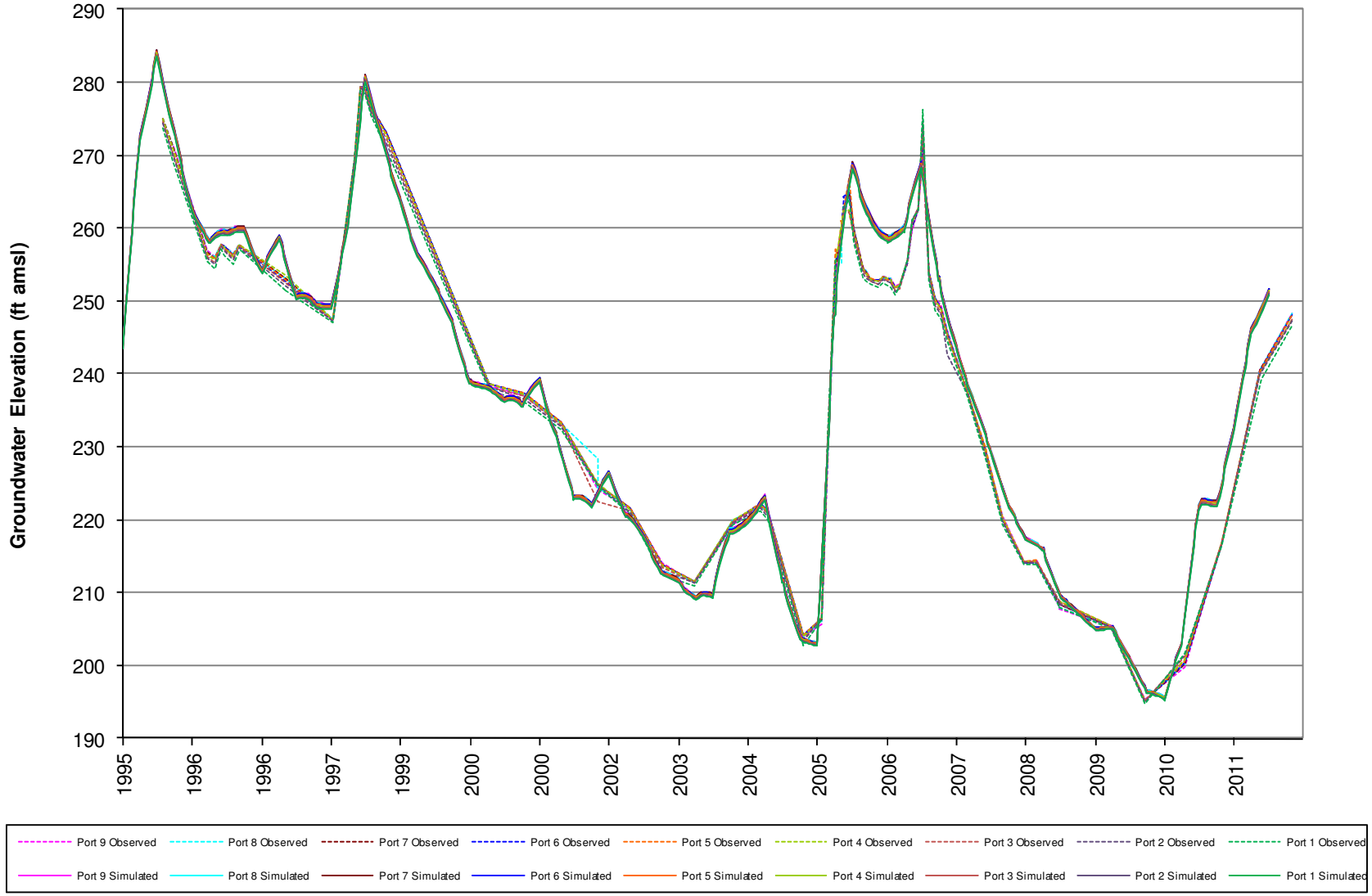


amec

LACO KEY WELL CALIBRATION HYDROGRAPH
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No. 7190

Figure **5-22**

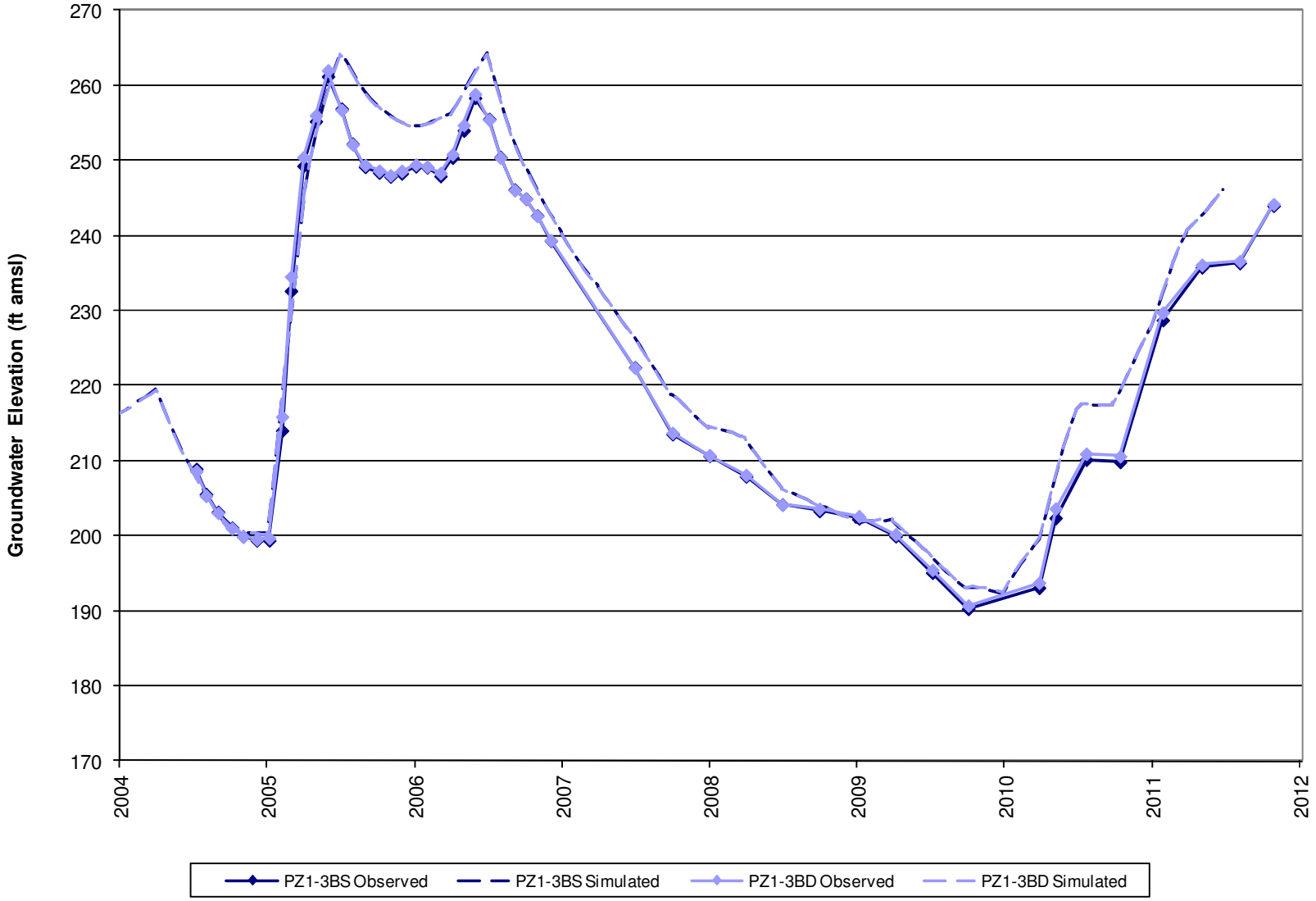


amec

SUBAREA 1 MULTIPORT WELL CALIBRATION HYDROGRAPH FOR MW 5-03
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No. 7190

Figure **5-23**

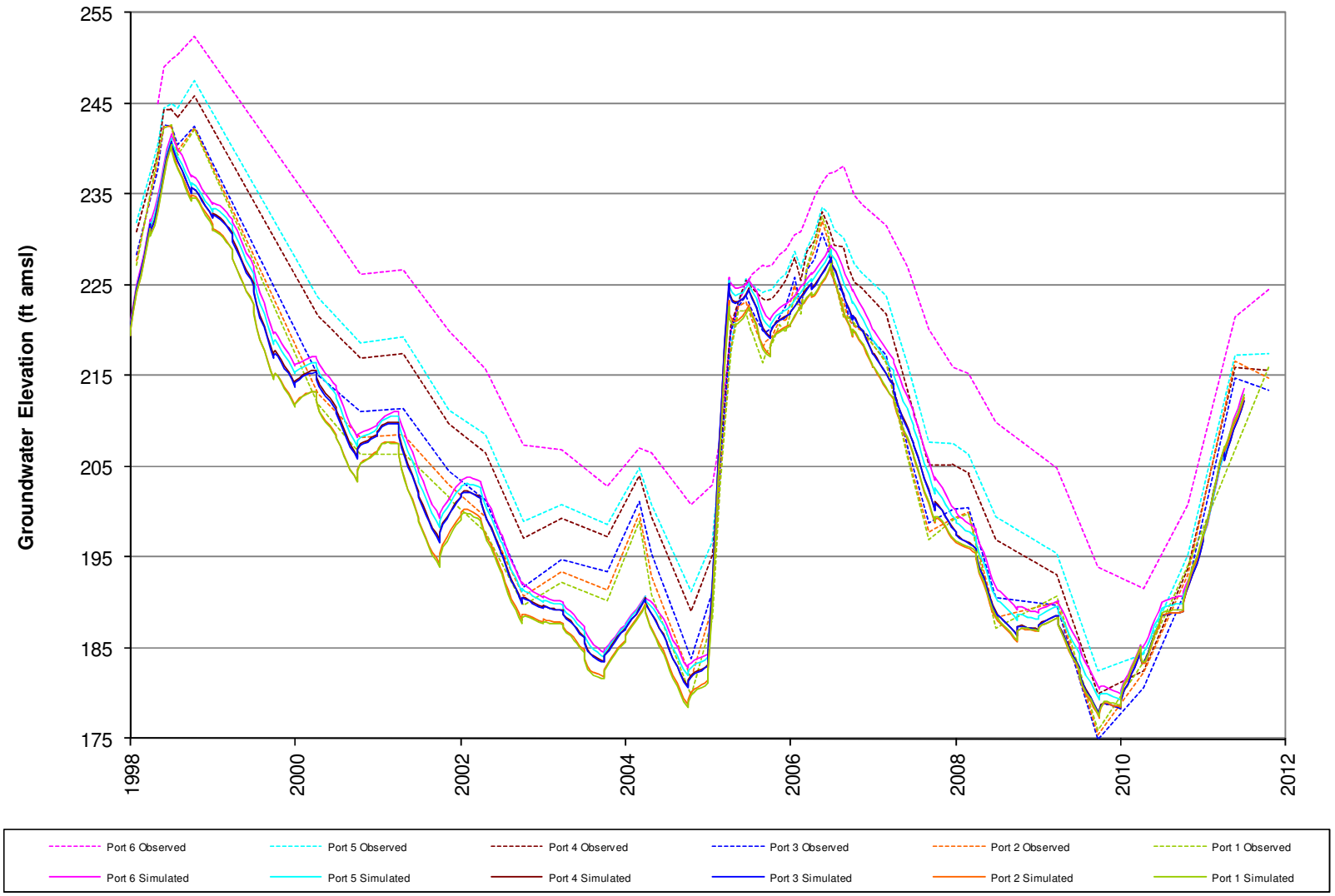


amec

SUBAREA 1 PIEZOMETER CALIBRATION HYDROGRAPH FOR PZ1-3B D/S
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No. 7190

Figure **5-24**

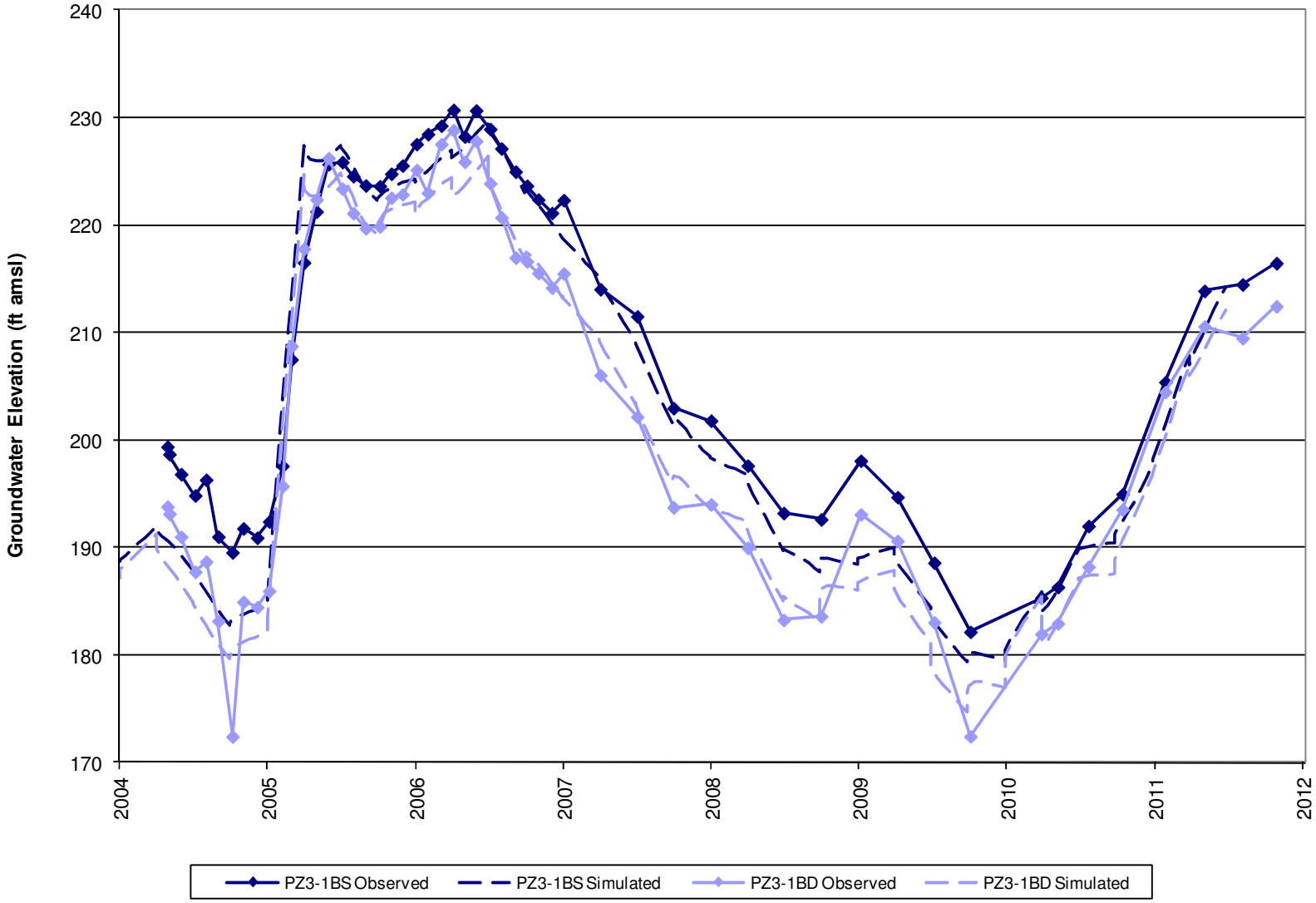


amec

SUBAREA 3 MULTIPORT WELL CALIBRATION HYDROGRAPH FOR MW 5-23
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No. 7190

Figure **5-25**

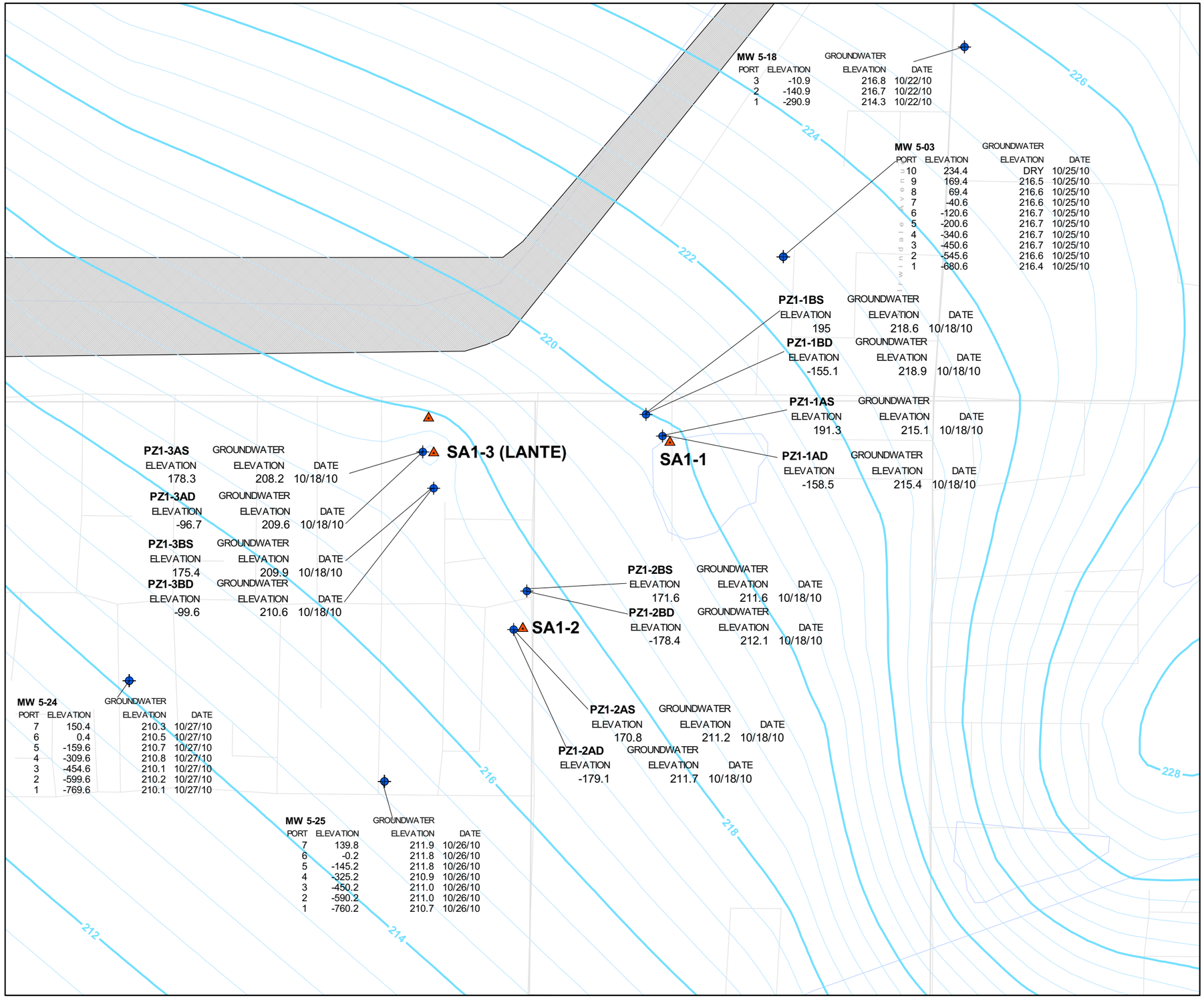


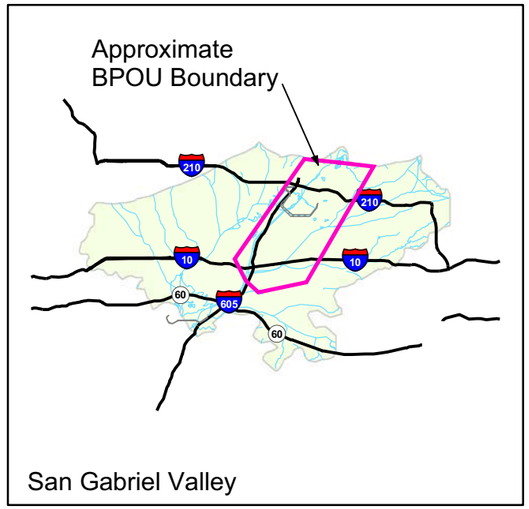
amec

SUBAREA 3 PIEZOMETER CALIBRATION HYDROGRAPH FOR PZ3-1B D/S
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No. 7190

Figure **5-26**





EXPLANATION

- Monitoring or Multiport Well
- Extraction or Pumping Well
- –194– Simulated Potentiometric Surface Elevation Contour Interval - 2.0 ft (elevation in feet above mean sea level)
- Simulated Potentiometric Surface Elevation Contour Interval - 0.5 ft (elevation in feet above mean sea level)

Note: Simulated head contours from model slice 6 - September 30, 2010.

500 0 500
FEET

N

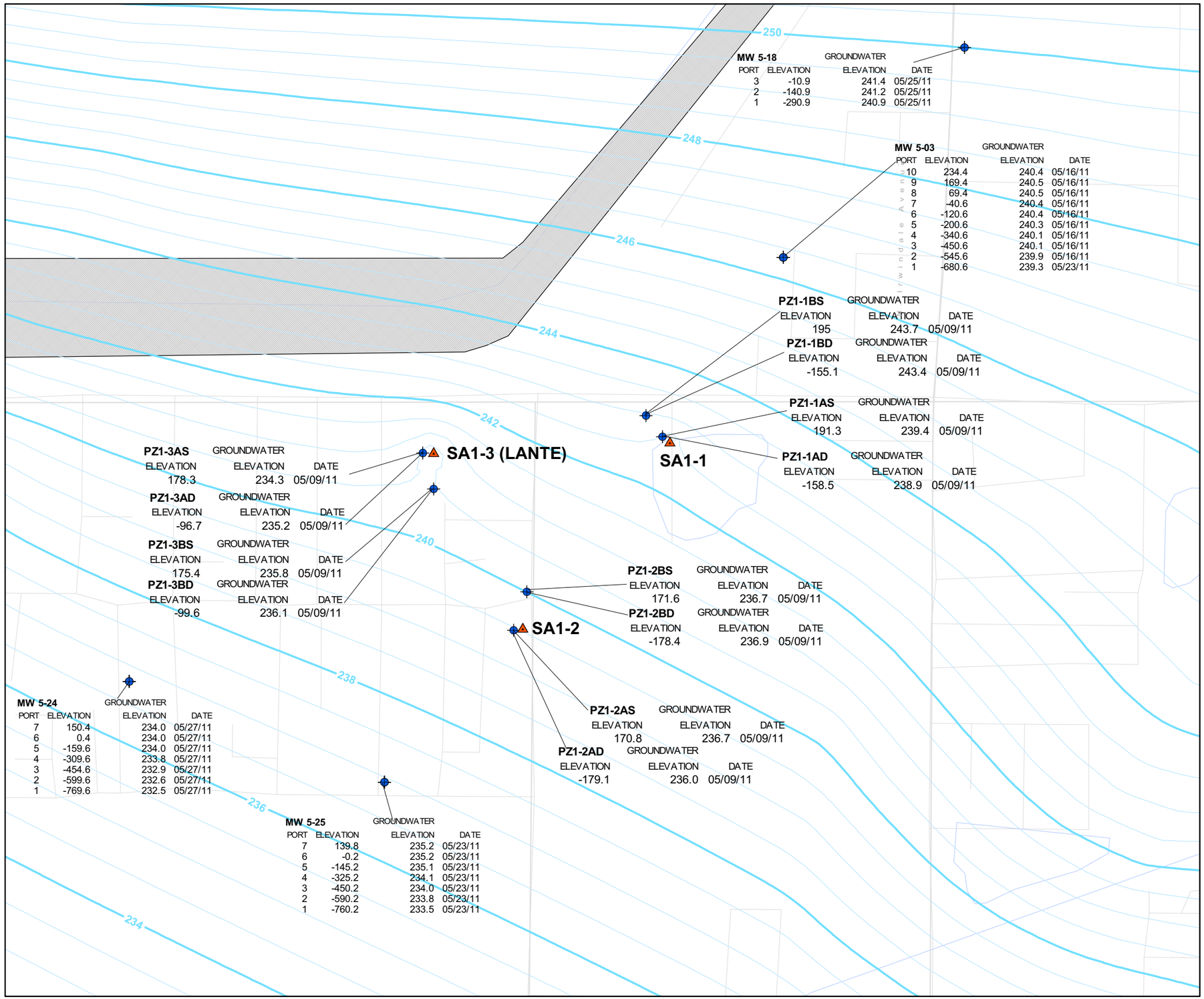
SUBAREA 1 SIMULATED FALL 2010
POTENTIOMETRIC SURFACE
Baldwin Park Operable Unit
San Gabriel Valley, California

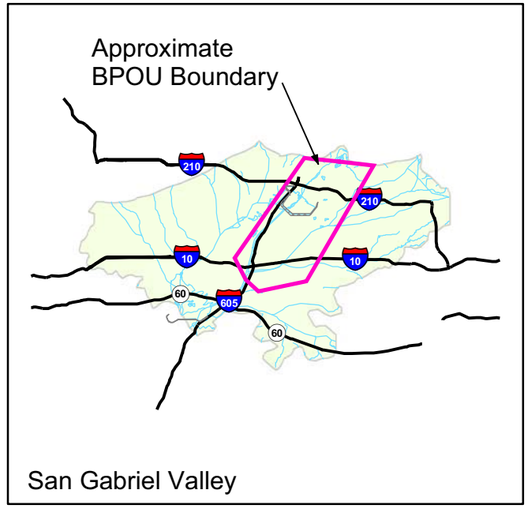
amec

Project No. 7190

Figure 5-27

\\den-fs1\gis\Projects\Aerojet 7190\GIS maps\Annual Report-Water Levels\201115-27 Fall2010 Sim GW Elevations SA1.mxd





EXPLANATION

- Monitoring or Multiport Well
- Extraction or Pumping Well
- Potentiometric Surface Elevation Contour Interval - 2.0 ft (elevation in feet above mean sea level)
- Potentiometric Surface Elevation Contour Interval - 0.5 ft (elevation in feet above mean sea level)

Note: Simulated head contours from model slice 6 - March 31, 2011.

500 0 500
FEET

N

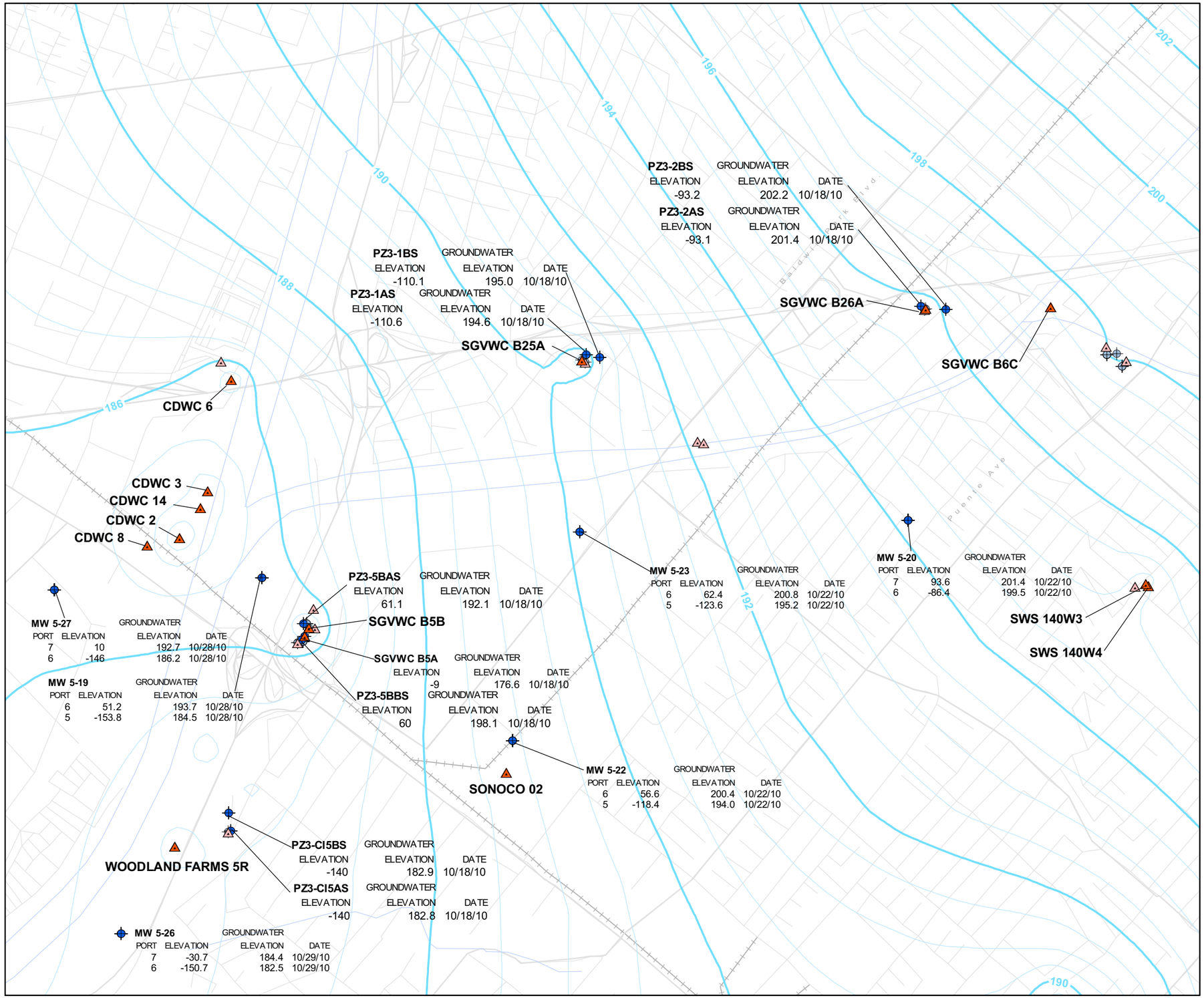
SUBAREA 1 SIMULATED SPRING 2011
POTENTIOMETRIC SURFACE
Baldwin Park Operable Unit
San Gabriel Valley, California

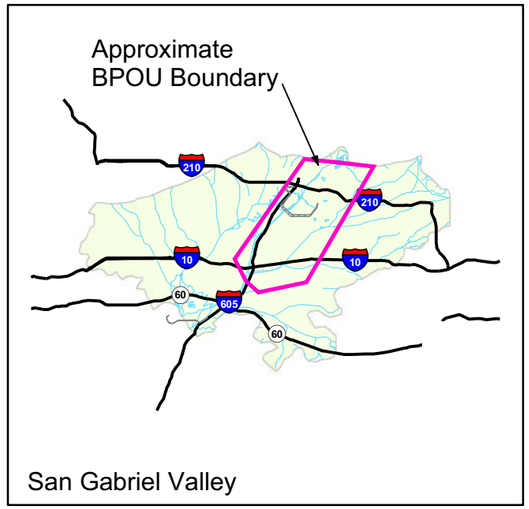
amec

Project No. 7190

Figure **5-28**

\\den-fs1\gis\Projects\Aerojet_7190\GIS_maps\Annual_Report-Water_Levels\2011\5-28_Spring2011_Sim_GW_Elevations_SA1.mxd





EXPLANATION

- Monitoring or multiport well
- Monitoring or multiport well (well midscreen not above -200 feet above mean sea level or groundwater elevation data not available)
- Extraction or pumping well
- Extraction or pumping well (well screen not above -200 feet above mean sea level)
- Potentiometric Surface Elevation Contour interval - 2.0 ft (elevation in feet above mean sea level)
- Potentiometric Surface Elevation Contour interval - 0.5 ft (elevation in feet above mean sea level)

Note: Simulated head contours from model slice 3 - September 30, 2010.

1,000 0 1,000
FEET

N

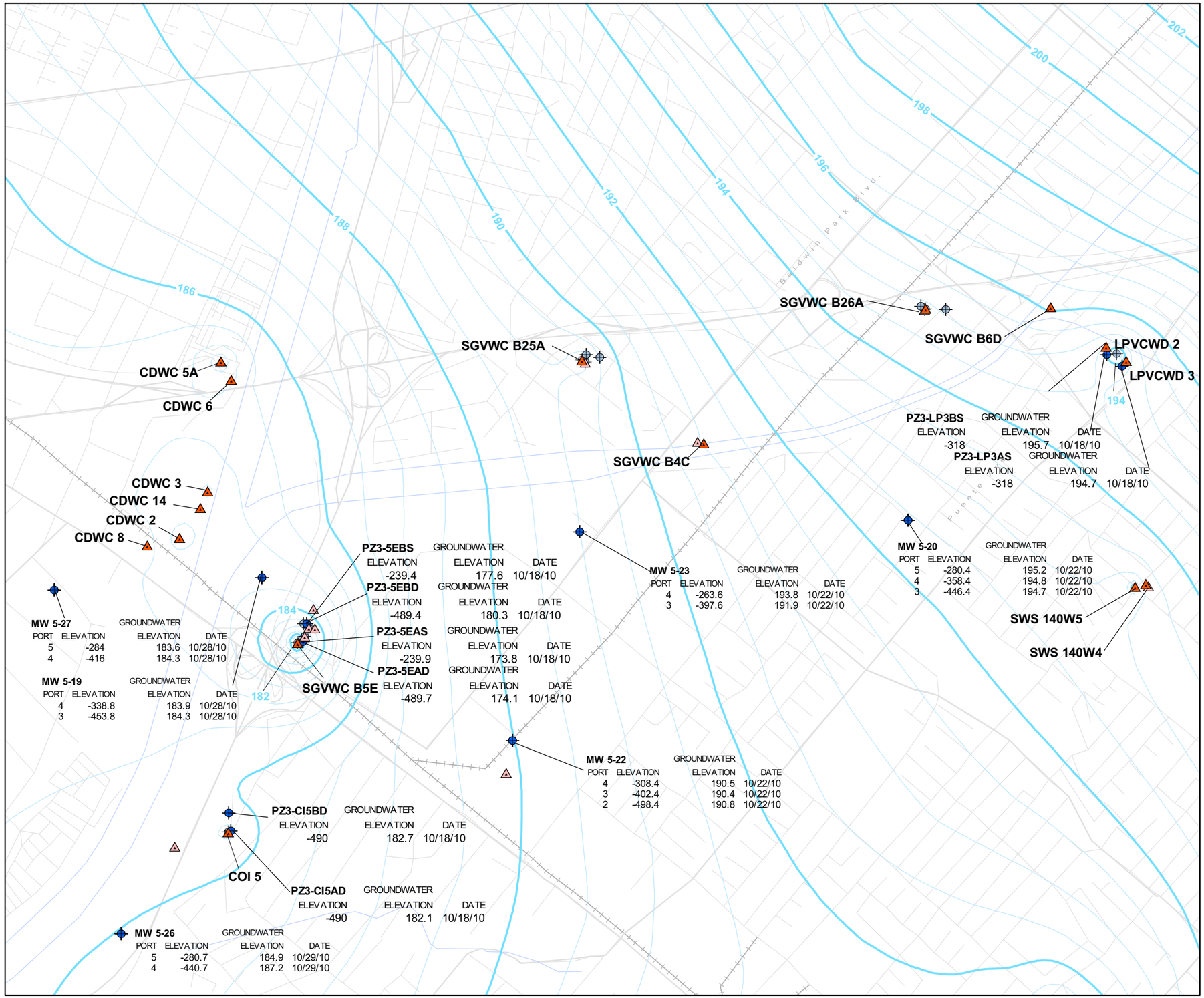
SUBAREA 3 SIMULATED FALL 2010
POTENTIOMETRIC SURFACE ABOVE
-200 FEET MSL
Baldwin Park Operable Unit
San Gabriel Valley, California

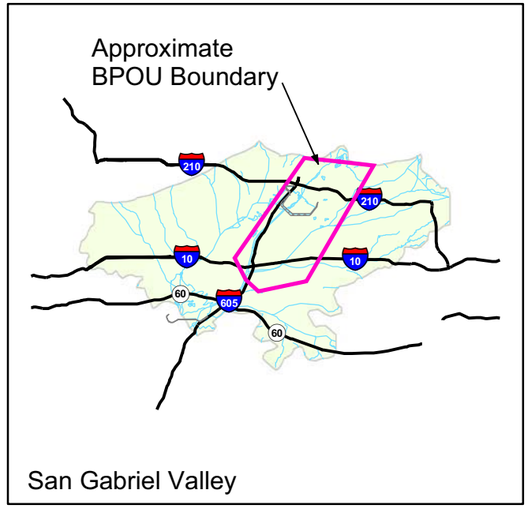
amec

Project No. 7190

Figure **5-29**

\\den-fs1\gis\Projects\Aerojet_7190\GIS_maps\Annual_Report-Water_Levels\20115-29_Fall2010_Sim_GW_Elevations_above_-200MSL.mxd





EXPLANATION

- Monitoring or multiport well
- Monitoring or multiport well (well midscreen not between -200 and -500 feet above mean sea level or groundwater elevation data not available)
- Extraction or pumping well
- Extraction or pumping well (well screen not between -200 and -500 feet above mean sea level)
- Potentiometric Surface Elevation Contour interval - 2.0 ft (elevation in feet above mean sea level)
- Potentiometric Surface Elevation Contour interval - 0.5 ft (elevation in feet above mean sea level)

Note: Simulated head contours from model slice 6 - September 30, 2010.

1,000 0 1,000
FEET

N

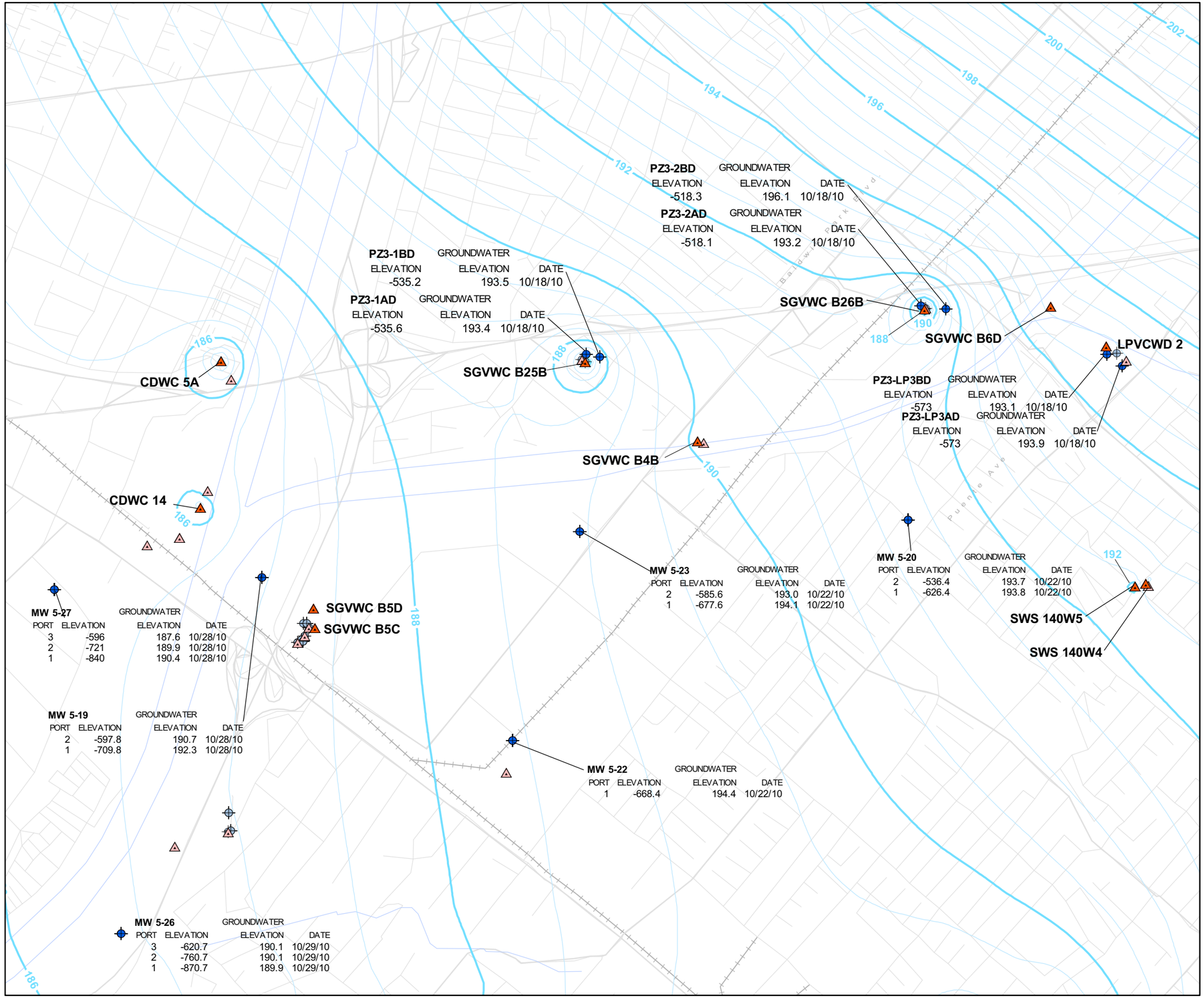
SUBAREA 3 SIMULATED FALL 2010
POTENTIOMETRIC SURFACE BETWEEN
-200 AND -500 FEET MSL
Baldwin Park Operable Unit
San Gabriel Valley, California

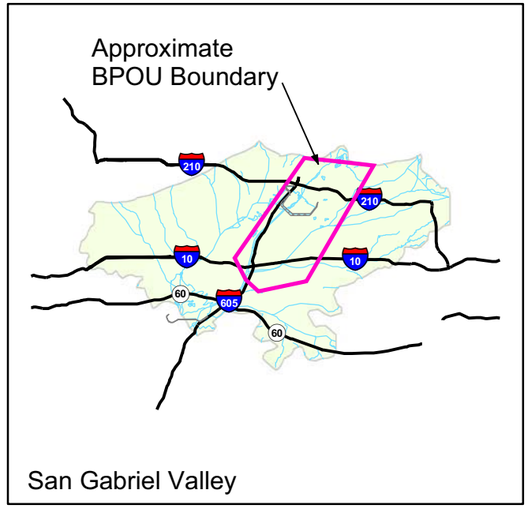
amec

Project No. 7190

Figure **5-30**

\\den-fs1\gis\Projects\Aerojet_7190\GIS_maps\Annual_Report-Water_Levels\2011\5-30_Fall2010_Sim_GW_Elevations_between_-200_and_-500MSL.mxd





EXPLANATION

- Monitoring or multiport well
- Monitoring or multiport well (well midscreen not below -500 feet above mean sea level or groundwater elevation data not available)
- Extraction or pumping well
- Extraction or pumping well (well screen not below -500 feet above mean sea level)
- Potentiometric Surface Elevation Contour interval - 2.0 ft (elevation in feet above mean sea level)
- Potentiometric Surface Elevation Contour interval - 0.5 ft (elevation in feet above mean sea level)

Note: Simulated head contours from model slice 9 - September 30, 2010.

1,000 0 1,000
FEET

N

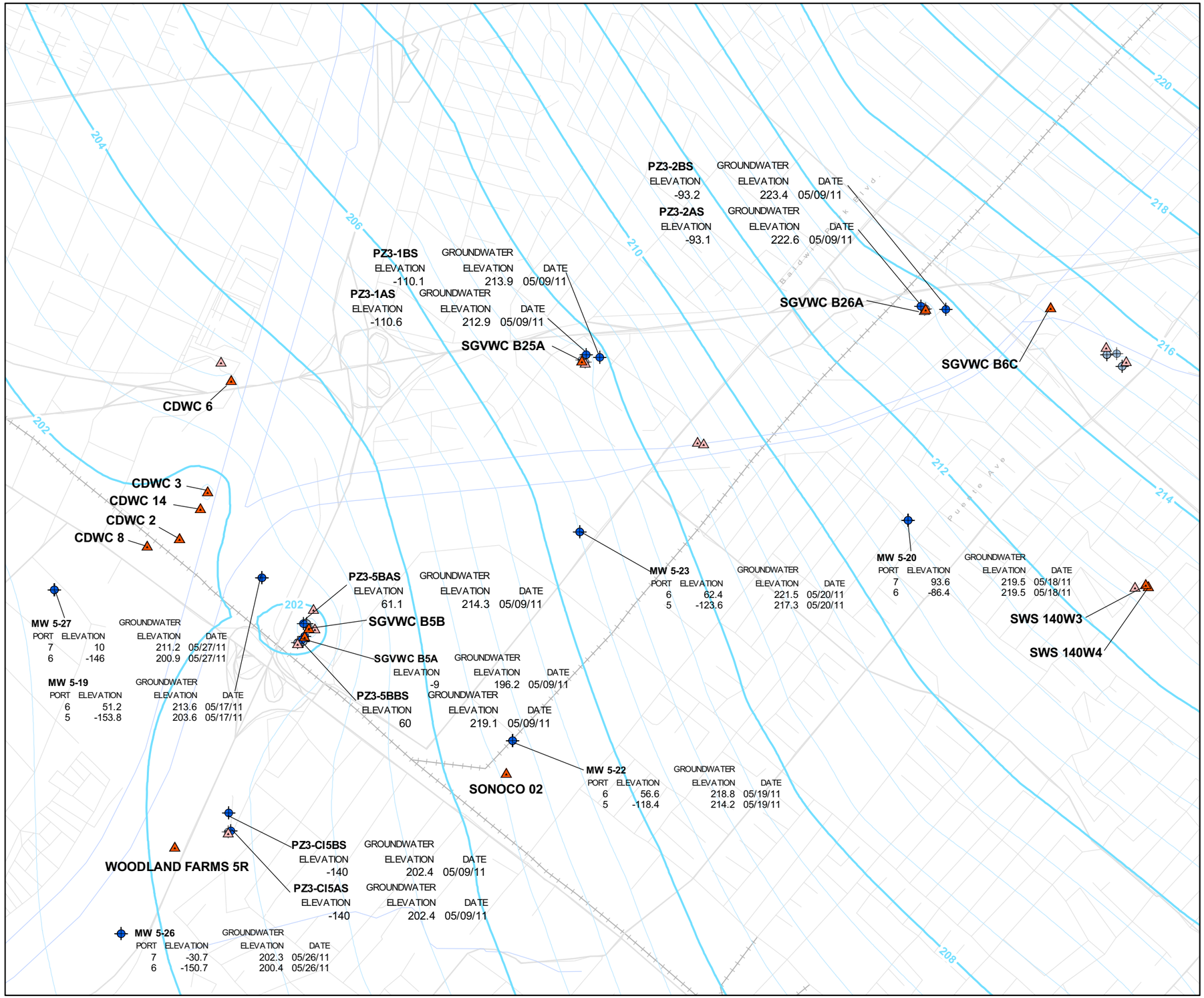
SUBAREA 3 SIMULATED FALL 2010
POTENTIOMETRIC SURFACE BELOW
-500 FEET MSL
Baldwin Park Operable Unit
San Gabriel Valley, California

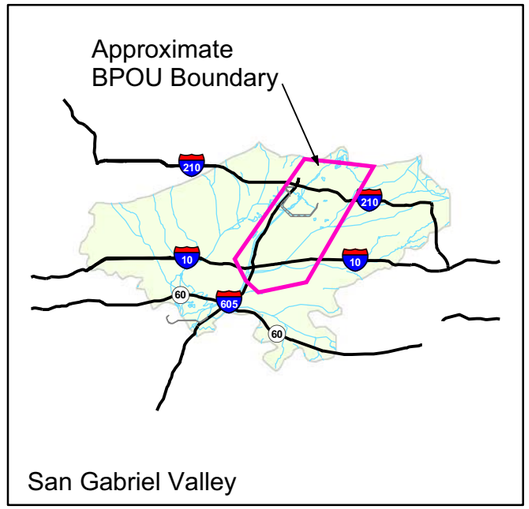
amec

Project No. 7190

Figure 5-31

\\den-fs1\gis\Projects\Aerojet 7190\GIS_maps\Annual_Report-Water_Levels\20115-31_Fall2010_Sim_GW_Elevations_below_-500MSL.mxd





EXPLANATION

- Monitoring or multiport well
- Monitoring or multiport well (well midscreen not above -200 feet above mean sea level or groundwater elevation data not available)
- Extraction or pumping well
- Extraction or pumping well (well screen not above -200 feet above mean sea level)
- Potentiometric Surface Elevation Contour interval - 2.0 ft (elevation in feet above mean sea level)
- Potentiometric Surface Elevation Contour interval - 0.5 ft (elevation in feet above mean sea level)

Note: Simulated head contours from model slice 3 - March 31, 2011.

1,000 0 1,000
FEET

N

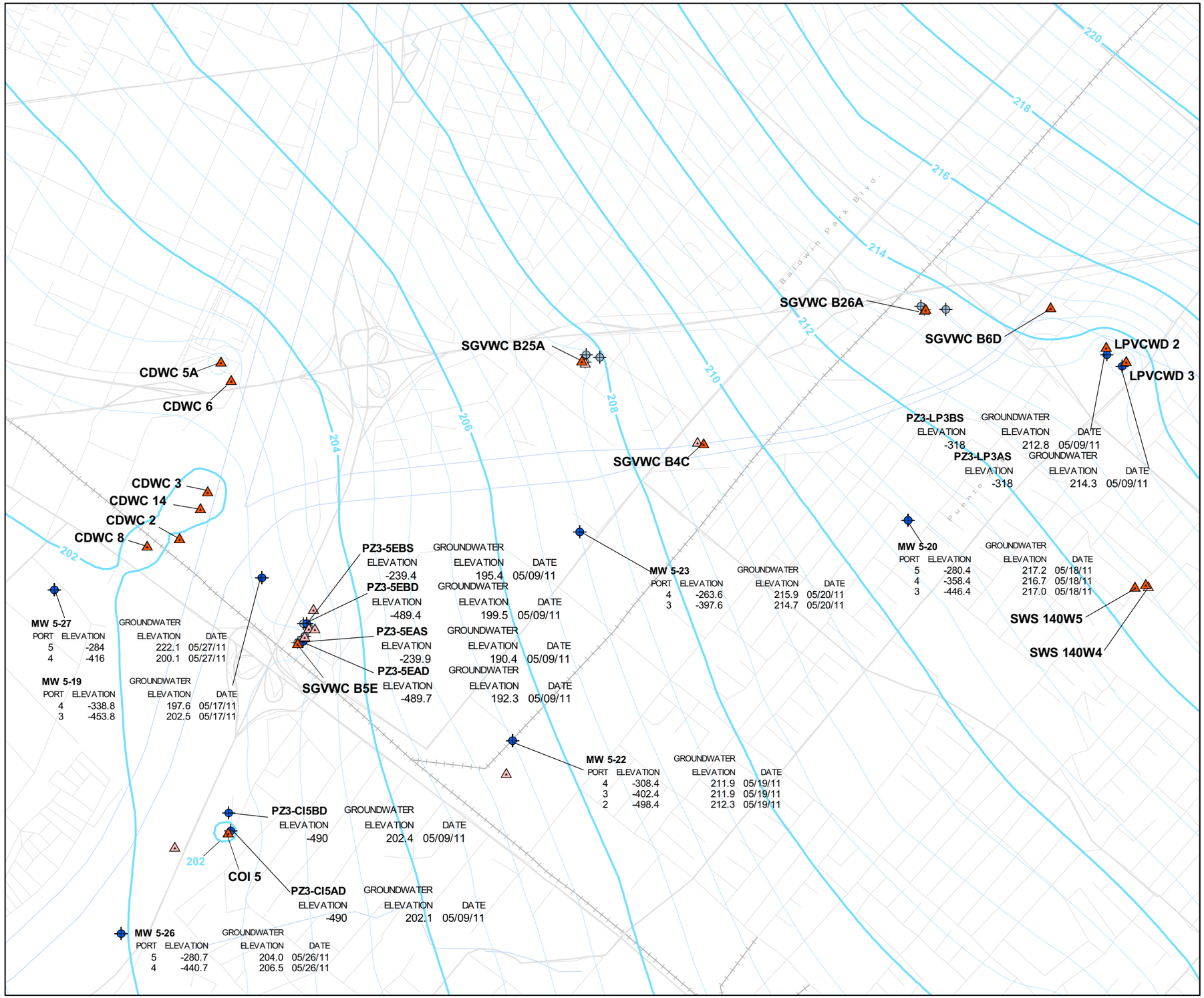
SUBAREA 3 SIMULATED SPRING 2011
POTENTIOMETRIC SURFACE ABOVE
-200 FEET MSL
Baldwin Park Operable Unit
San Gabriel Valley, California

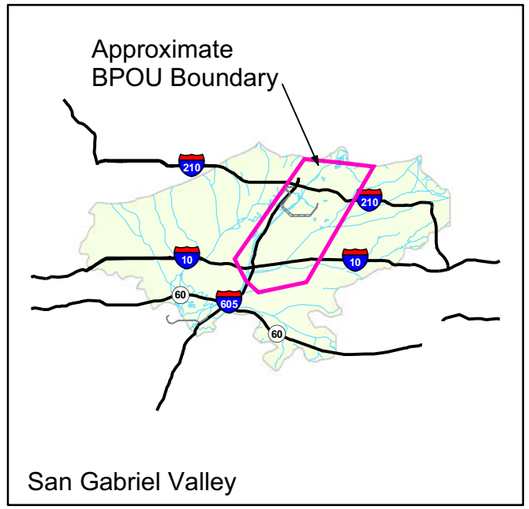
amec

Project No. 7190

Figure 5-32

\\den-fs1\gis\Projects\Aerojet 7190\GIS_maps\Annual Report-Water Levels\2011\5-32 Spring2011 Sim GW Elevations above -200MSL.mxd





EXPLANATION

- Monitoring or multiport well
- Monitoring or multiport well (well midscreen not between -200 and -500 feet above mean sea level or groundwater elevation data not available)
- Extraction or pumping well
- Extraction or pumping well (well screen not between -200 and -500 feet above mean sea level)
- Potentiometric Surface Elevation Contour interval - 2.0 ft (elevation in feet above mean sea level)
- Potentiometric Surface Elevation Contour interval - 0.5 ft (elevation in feet above mean sea level)

Note: Simulated head contours from model slice 6 - March 31, 2011.

1,000 0 1,000
FEET

N

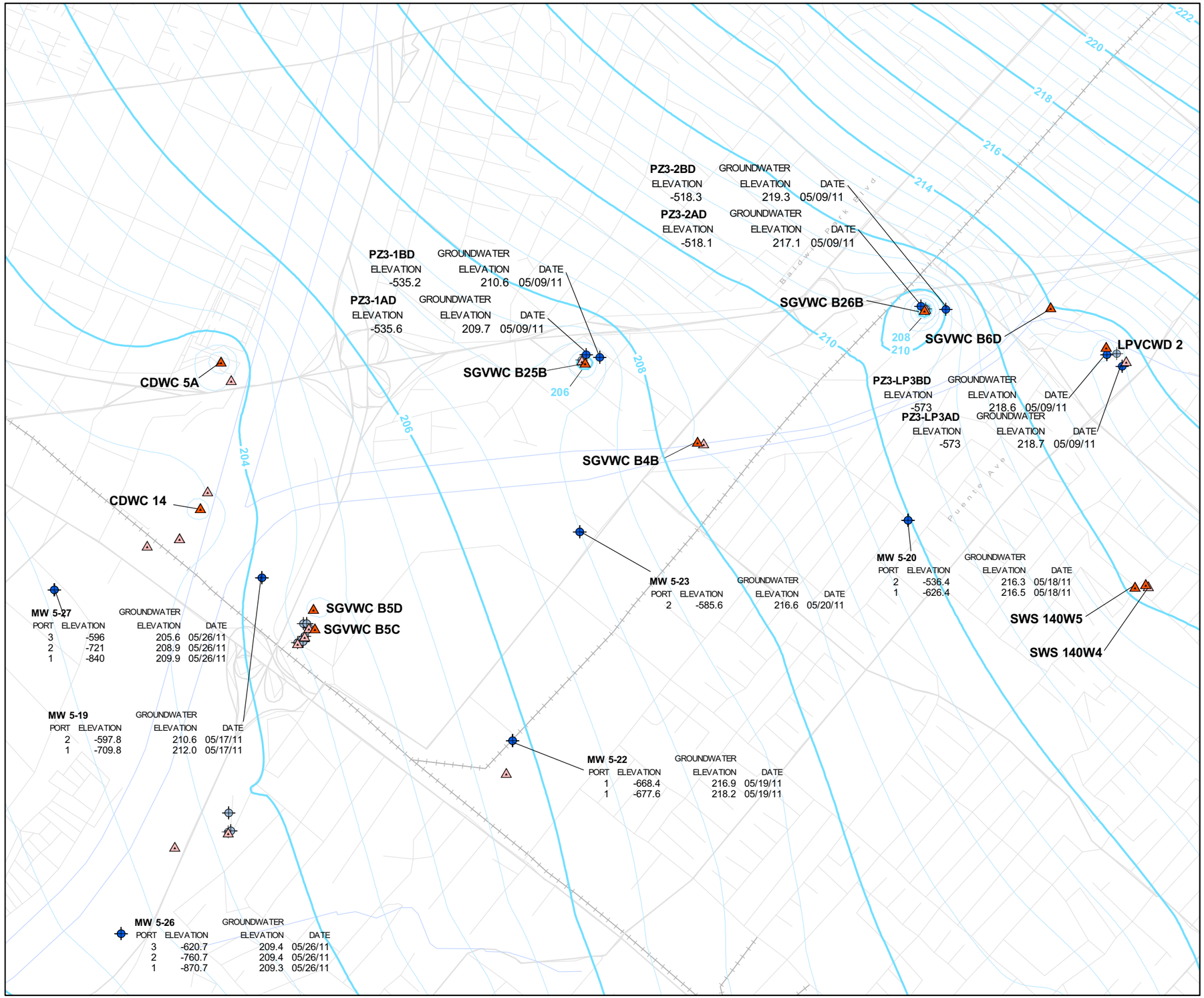
SUBAREA 3 SIMULATED SPRING 2011
POTENTIOMETRIC SURFACE BETWEEN
-200 AND -500 FEET MSL
Baldwin Park Operable Unit
San Gabriel Valley, California

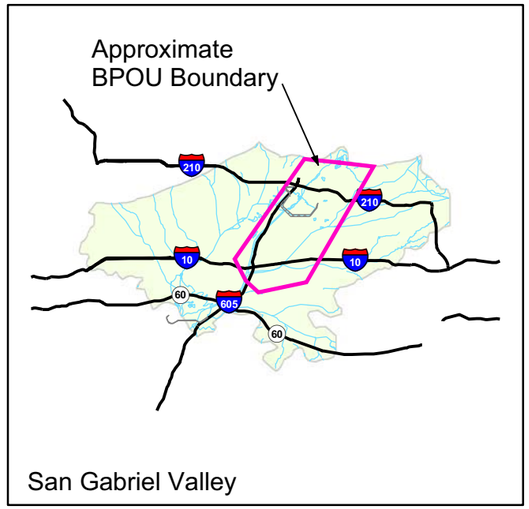
amec

Project No. 7190

Figure 5-33

\\den-fs1\gis\Projects\Aerojet_7190\GIS_maps\Annual_Report-Water_Levels\2011\5-33_Spring2011_Sim_GW_Elevations_between_-200_and_-500MSL.mxd





EXPLANATION

- Monitoring or multiport well
- Monitoring or multiport well (well midscreen not below -500 feet above mean sea level or groundwater elevation data not available)
- Extraction or pumping well
- Extraction or pumping well (well screen not below -500 feet above mean sea level)
- Potentiometric Surface Elevation Contour interval - 2.0 ft (elevation in feet above mean sea level)
- Potentiometric Surface Elevation Contour interval - 0.5 ft (elevation in feet above mean sea level)

Note: Simulated head contours from model slice 9 - March 31, 2011.

1,000 0 1,000
FEET

N

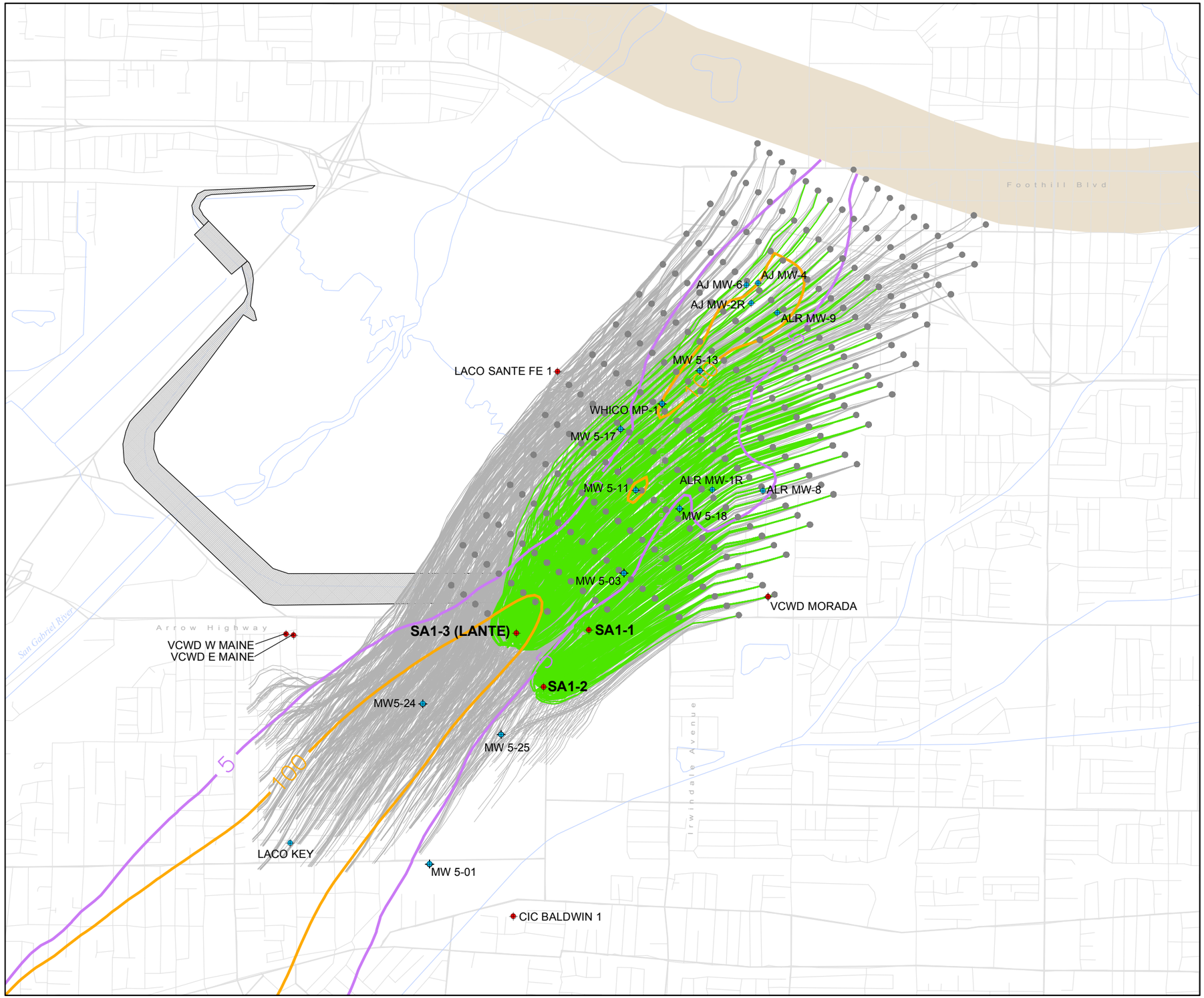
SUBAREA 3 SIMULATED SPRING 2011
POTENTIOMETRIC SURFACE BELOW
-500 FEET MSL
Baldwin Park Operable Unit
San Gabriel Valley, California

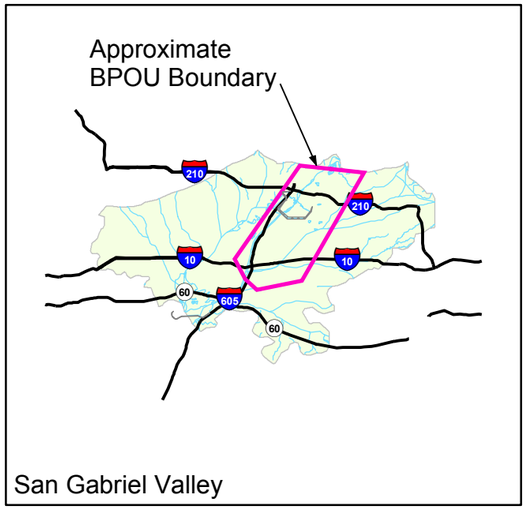
amec

Project No. 7190

Figure **5-34**

\\den-fs1\gis\Projects\Aerojet_7190\GIS_maps\Annual_Report-Water_Levels\20115-34_Spring2011_Sim_GW_Elevations_below_-500MSL.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 2011 Trichloroethene composite isoconcentration contour (5 ug/L)
- 2011 Trichloroethene composite isoconcentration contour (100 ug/L)
- Duarte fault zone

THREE-YEAR FORWARD PARTICLE TRACKS

- Track of particle
- Track of particle removed by project extraction well
- Initial particle location

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

NOTES:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.
2. Data from the period modeled were used to create three-dimensional isoconcentration shells of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration at all elevations.
3. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

2,000 0 2,000

SCALE IN FEET

N

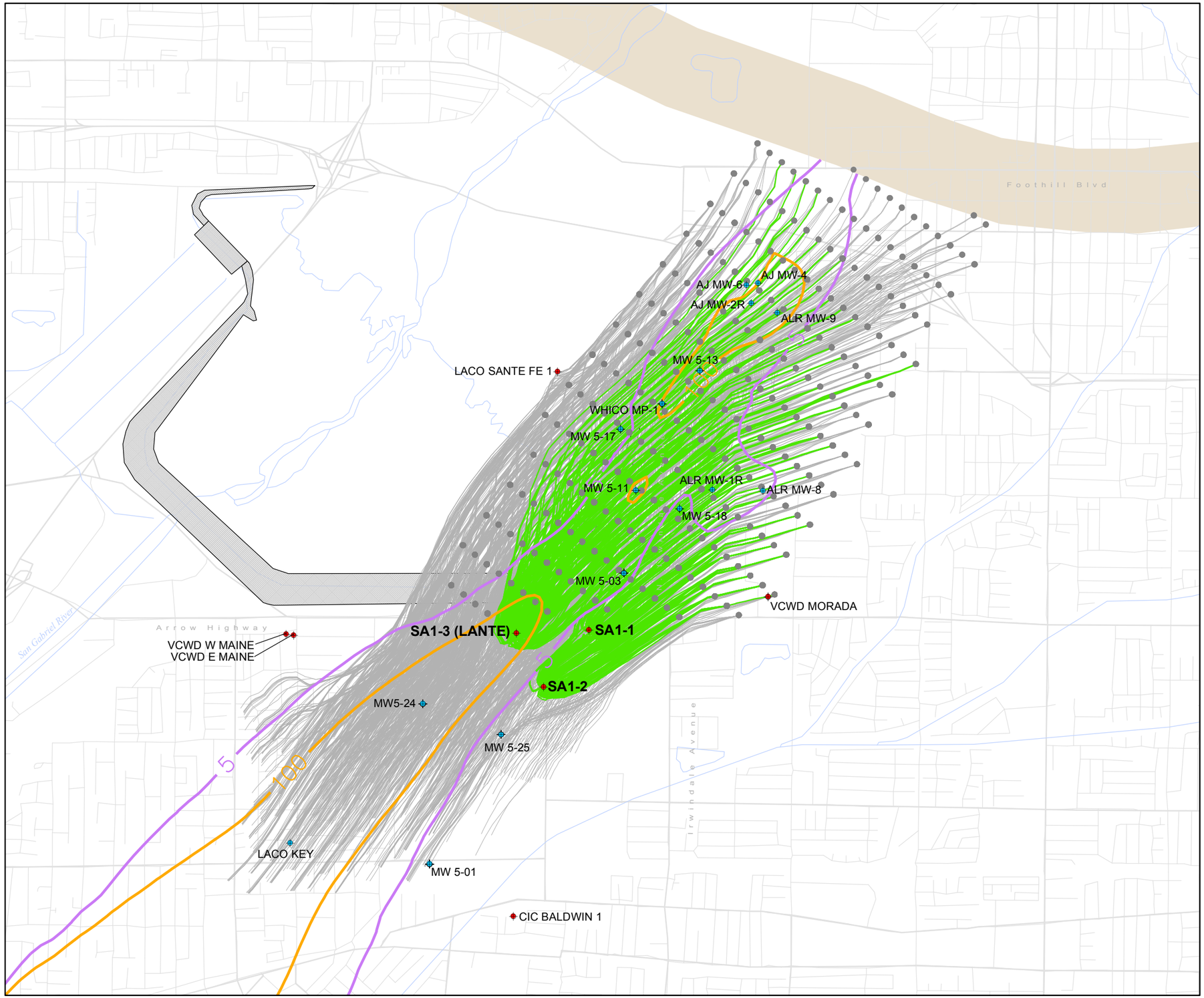
FORWARD PARTICLE TRACKS
SUBAREA 1
ENDING SEPTEMBER 30, 2010
Baldwin Park Operable Unit
San Gabriel Valley, California

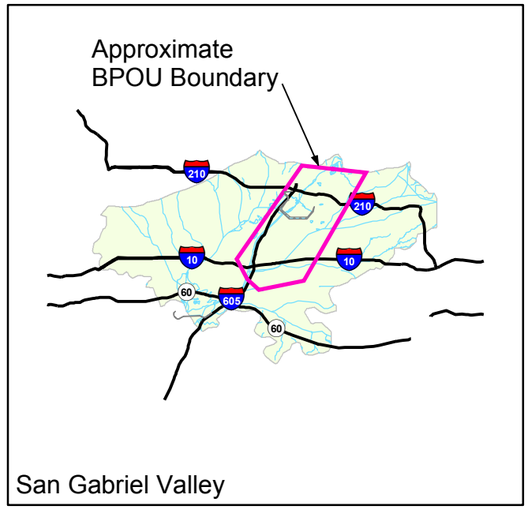
amec

Project No. 7190

Figure **5-35**

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual_Report-Particle_Tracks\2011\5-35_Fwd_ParticleTracks_SA1_3yr_2010Q3.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 2011 Trichloroethene composite isoconcentration contour (5 ug/L)
- 2011 Trichloroethene composite isoconcentration contour (100 ug/L)
- Duarte fault zone

THREE-YEAR FORWARD PARTICLE TRACKS

- Track of particle
- Track of particle removed by project extraction well
- Initial particle location

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

NOTES:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.
2. Data from the period modeled were used to create three-dimensional isoconcentration shells of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration at all elevations.
3. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

2,000 0 2,000

SCALE IN FEET

N

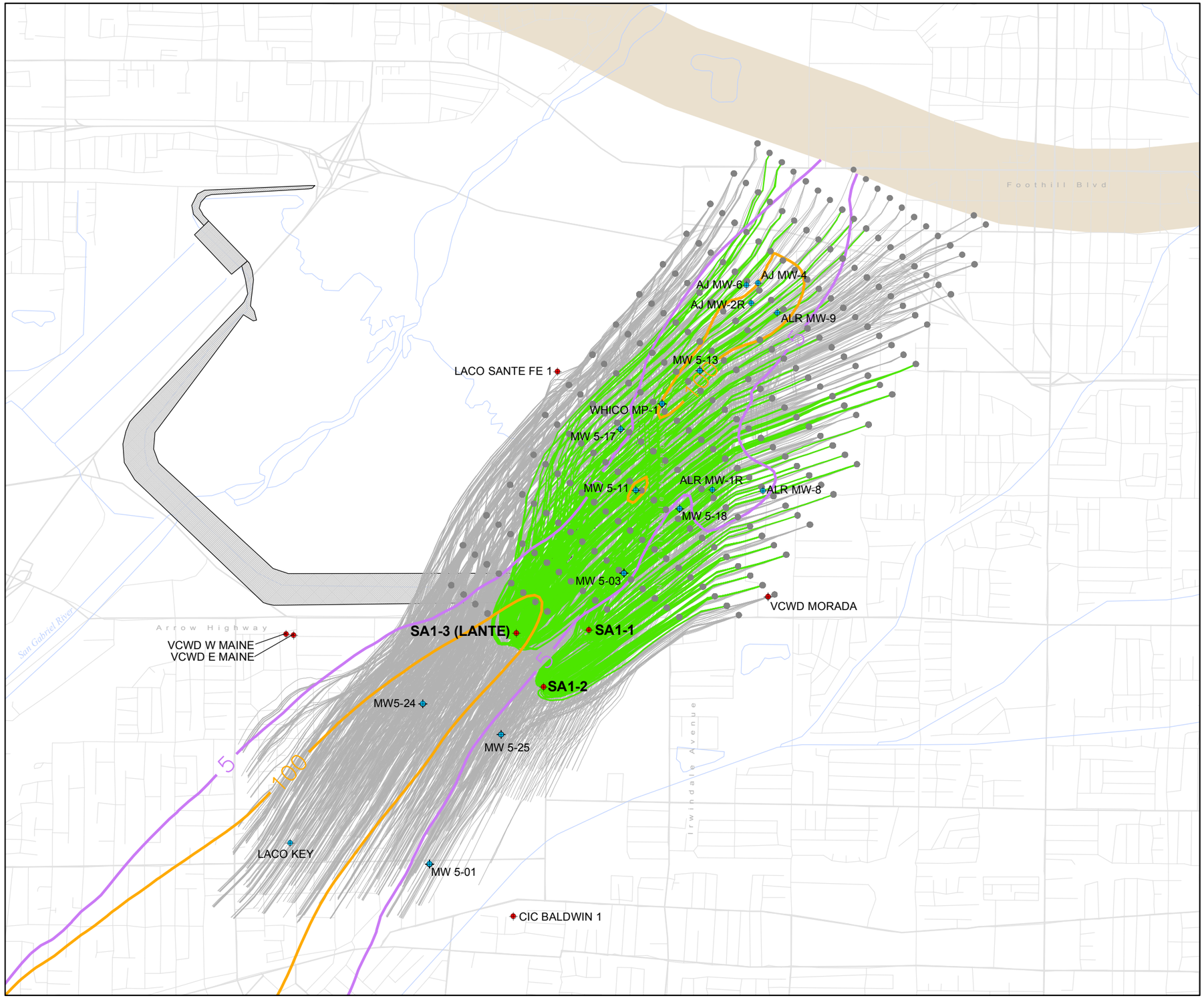
FORWARD PARTICLE TRACKS
SUBAREA 1
ENDING DECEMBER 31, 2010
Baldwin Park Operable Unit
San Gabriel Valley, California

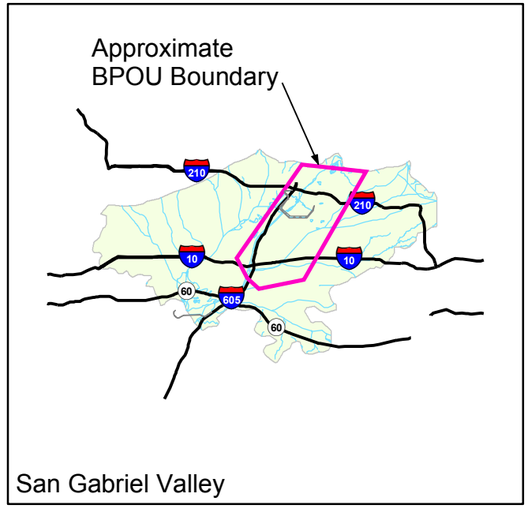
amec

Project No. 7190

Figure **5-36**

\\den-fs1\GIS\Projects\Aerojet 7190\GIS_maps\Annual_Report-Particle_Tracks\20115-36_Fwd_ParticleTracks_SA1_3yr_2010Q4.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 2011 Trichloroethene composite isoconcentration contour (5 ug/L)
- 2011 Trichloroethene composite isoconcentration contour (100 ug/L)
- Duarte fault zone

THREE-YEAR FORWARD PARTICLE TRACKS

- Track of particle
- Track of particle removed by project extraction well
- Initial particle location

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

NOTES:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.
2. Data from the period modeled were used to create three-dimensional isoconcentration shells of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration at all elevations.
3. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

2,000 0 2,000

SCALE IN FEET

N

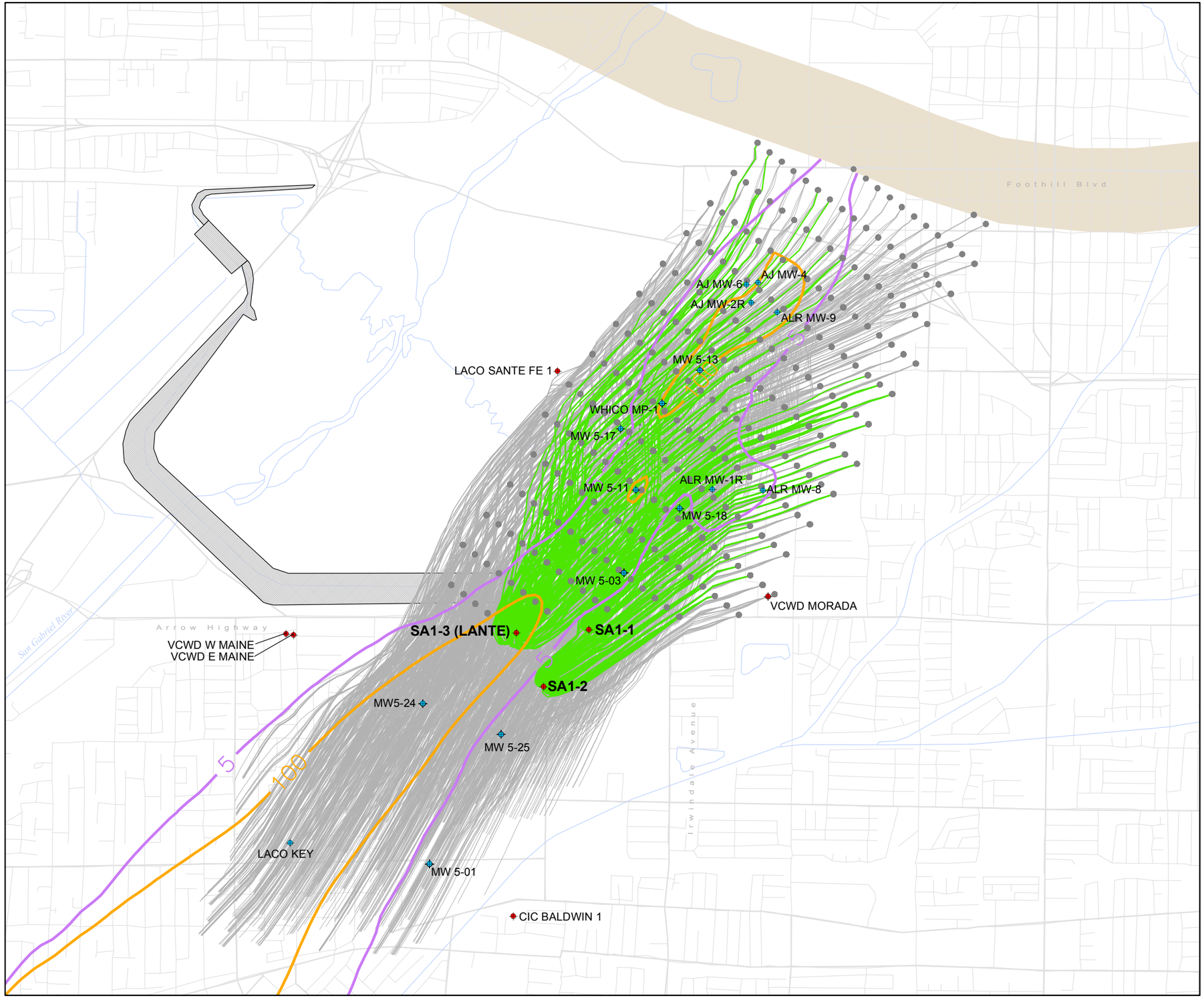
FORWARD PARTICLE TRACKS
SUBAREA 1
ENDING MARCH 31, 2011
Baldwin Park Operable Unit
San Gabriel Valley, California

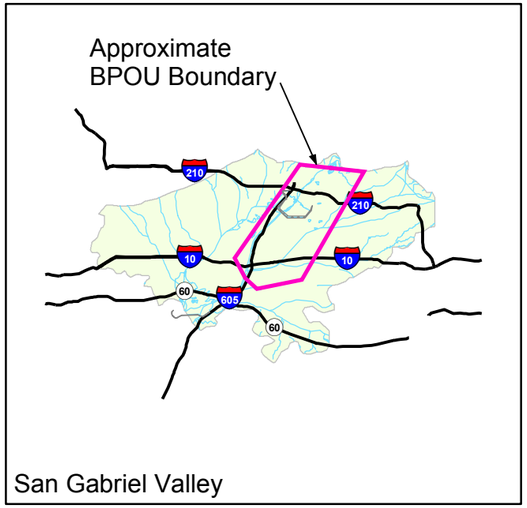
amec

Project No. 7190

Figure **5-37**

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual_Report-Particle_Tracks\201115-37_Fwd_ParticleTracks_SA1_3yr_2011Q1.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 2011 Trichloroethene composite isoconcentration contour (5 ug/L)
- 2011 Trichloroethene composite isoconcentration contour (100 ug/L)
- Duarte fault zone

THREE-YEAR FORWARD PARTICLE TRACKS

- Track of particle
- Track of particle removed by project extraction well
- Initial particle location

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

NOTES:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.
2. Data from the period modeled were used to create three-dimensional isoconcentration shells of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration at all elevations.
3. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

2,000 0 2,000

SCALE IN FEET

N

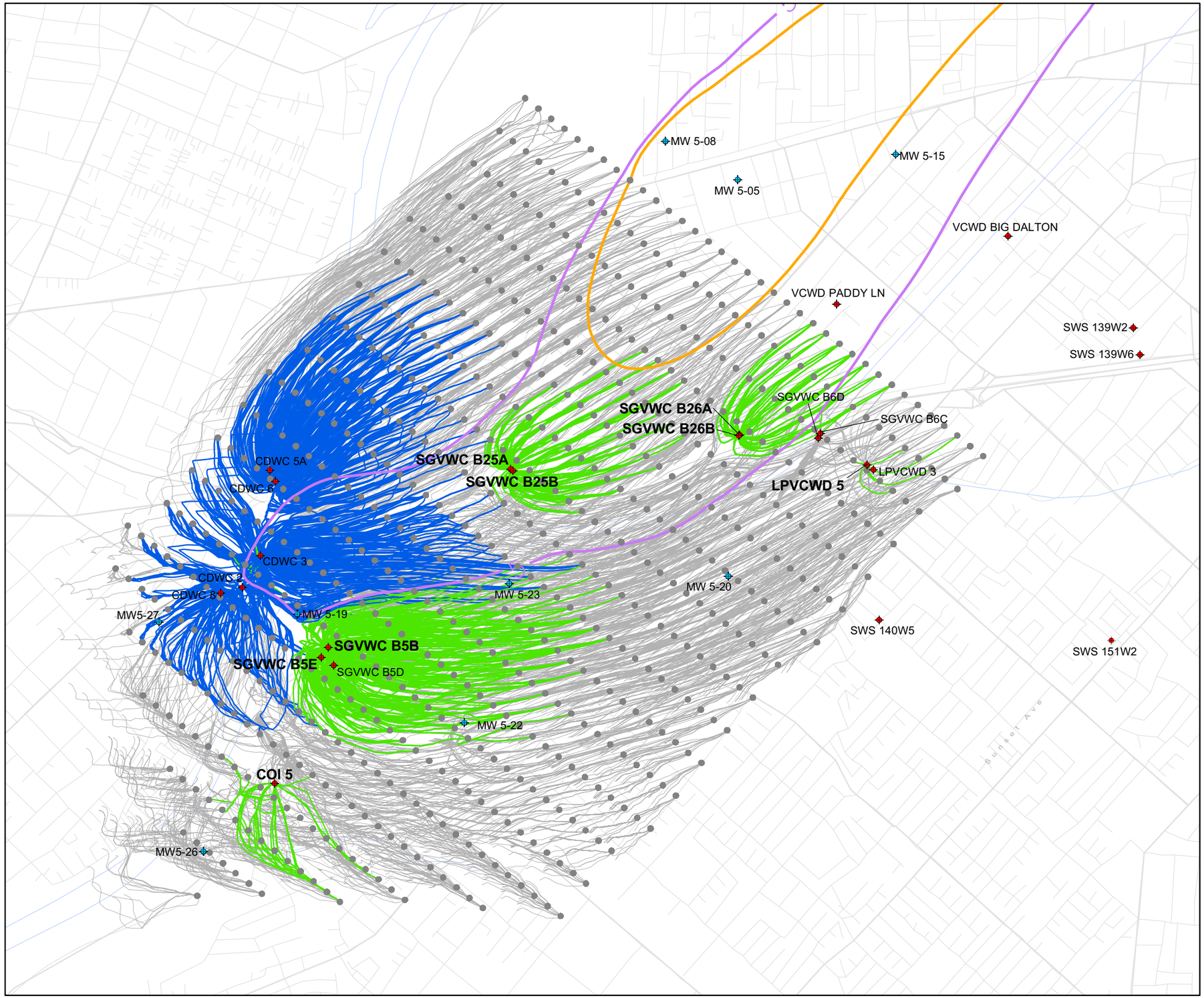
FORWARD PARTICLE TRACKS
SUBAREA 1
ENDING JUNE 30, 2011
Baldwin Park Operable Unit
San Gabriel Valley, California

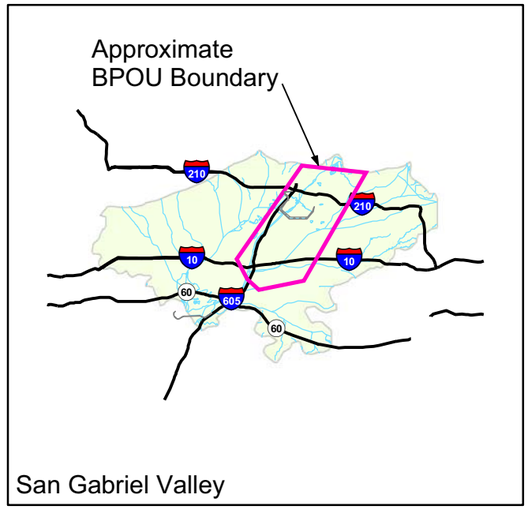
amec

Project No. 7190

Figure **5-38**

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual_Report-Particle_Tracks\2011\5-38_Fwd_ParticleTracks_SA1_3yr_2011Q2.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval above -200 feet (5 ug/L)
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval above -200 feet (100 ug/L)

THREE-YEAR FORWARD PARTICLE TRACKS

- Track of particle
- Track of particle removed by project extraction well
- Track of particle removed by non-project extraction well
- Initial particle location

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

NOTES:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.
2. Data from the period modeled were used to create three-dimensional isoconcentration shells of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration above -200 ft MSL.
3. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

2,000 0 2,000

SCALE IN FEET

N

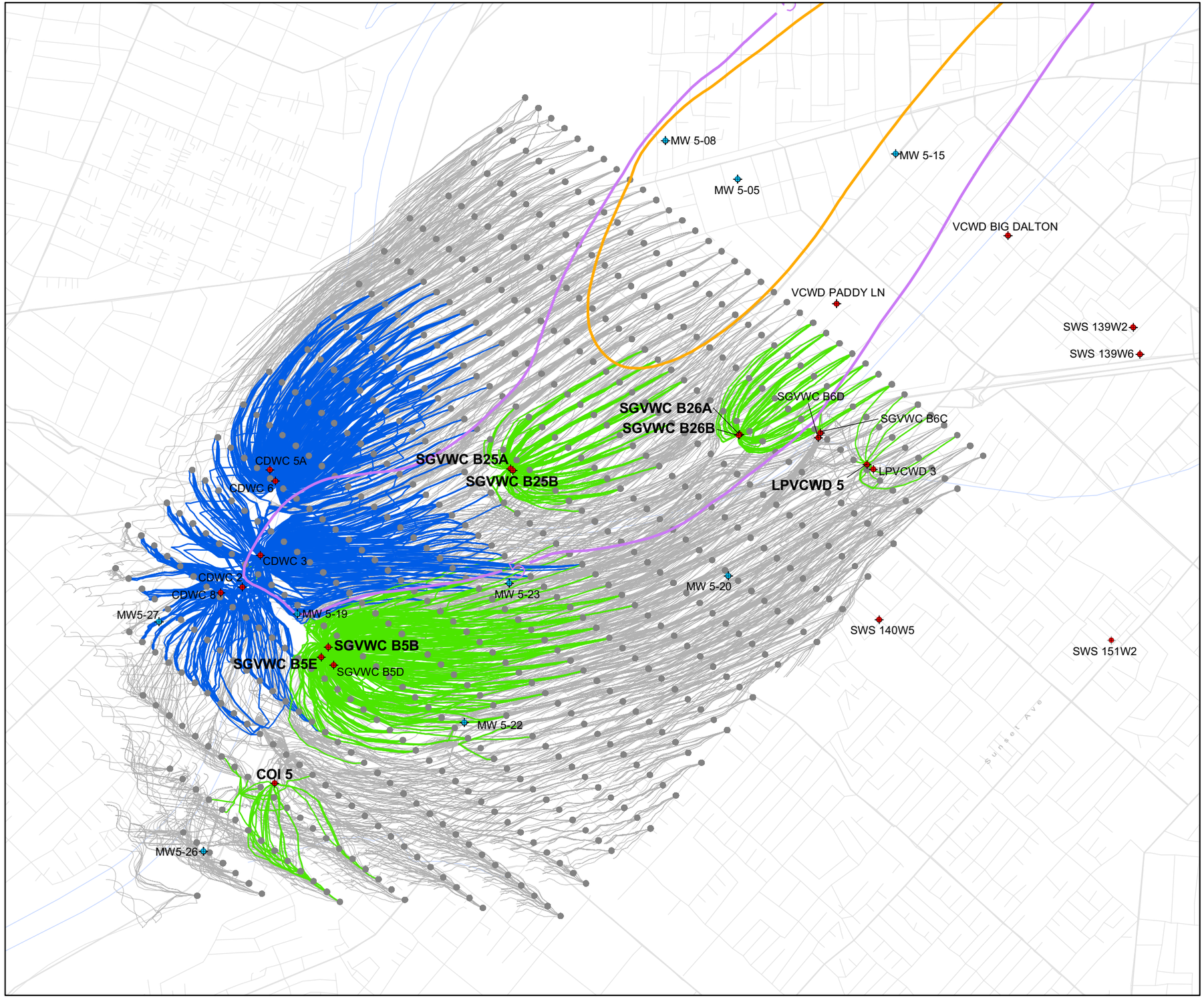
FORWARD PARTICLE TRACKS
SUBAREA 3 ABOVE -200 FEET MSL
ENDING SEPTEMBER 30, 2010
Baldwin Park Operable Unit
San Gabriel Valley, California

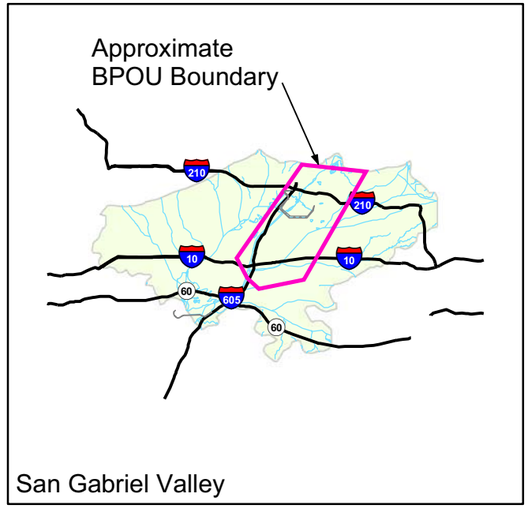
amec

Project No. 7190

Figure 5-39

\\den-fs1\gis\Projects\Aerojet 7190\GIS_maps\Annual_Report-Particle_Tracks\201115-39_Fwd_ParticleTracks_SA3_sh_3yr_2010Q3.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval above -200 feet (5 ug/L)
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval above -200 feet (100 ug/L)

THREE-YEAR FORWARD PARTICLE TRACKS

- Track of particle
- Track of particle removed by project extraction well
- Track of particle removed by non-project extraction well
- Initial particle location

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

NOTES:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.
2. Data from the period modeled were used to create three-dimensional isoconcentration shells of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration above -200 ft MSL.
3. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

N

2,000 0 2,000

SCALE IN FEET

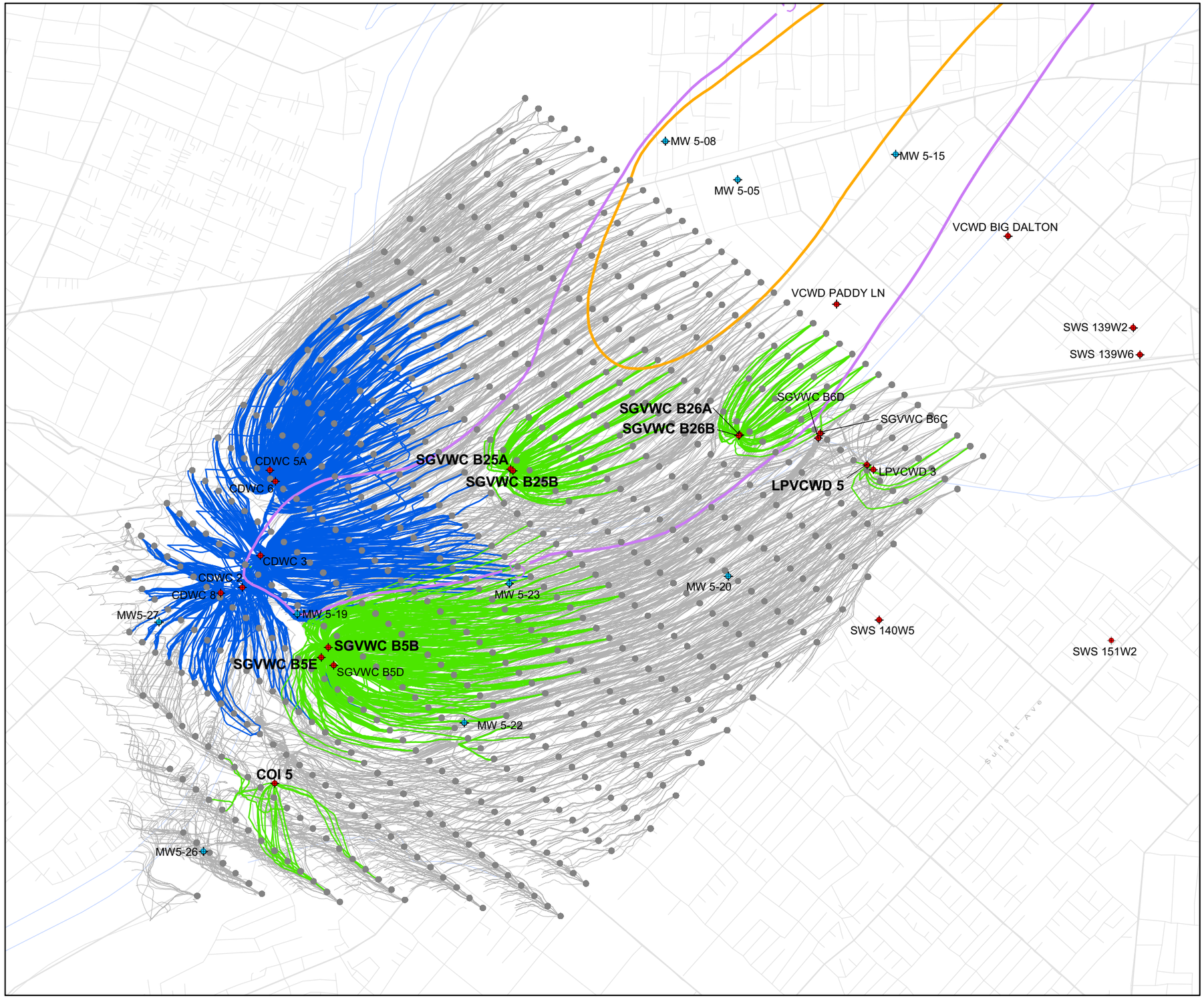
FORWARD PARTICLE TRACKS
SUBAREA 3 ABOVE -200 FEET MSL
ENDING DECEMBER 31, 2010
Baldwin Park Operable Unit
San Gabriel Valley, California

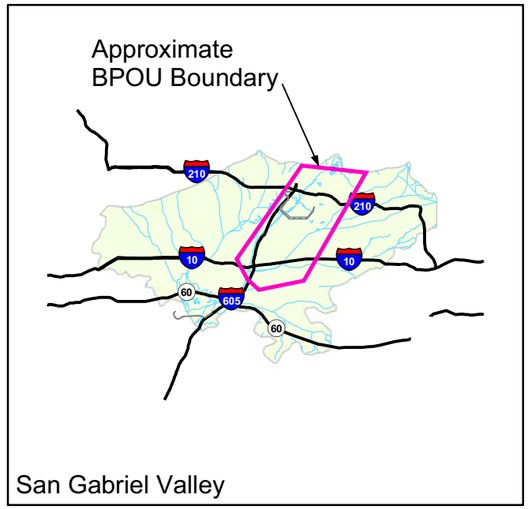
amec

Project No. 7190

Figure **5-40**

\\den-fs1\gis\Projects\Aerojet 7190\GIS_maps\Annual_Report-Particle_Tracks\20115-40_Fwd_ParticleTracks_SA3_sh_3yr_2010Q4.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval above -200 feet (5 ug/L)
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval above -200 feet (100 ug/L)

THREE-YEAR FORWARD PARTICLE TRACKS

- Track of particle
- Track of particle removed by project extraction well
- Track of particle removed by non-project extraction well
- Initial particle location

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

NOTES:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.
2. Data from the period modeled were used to create three-dimensional isoconcentration shells of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration above -200 ft MSL.
3. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

2,000 0 2,000

SCALE IN FEET

N

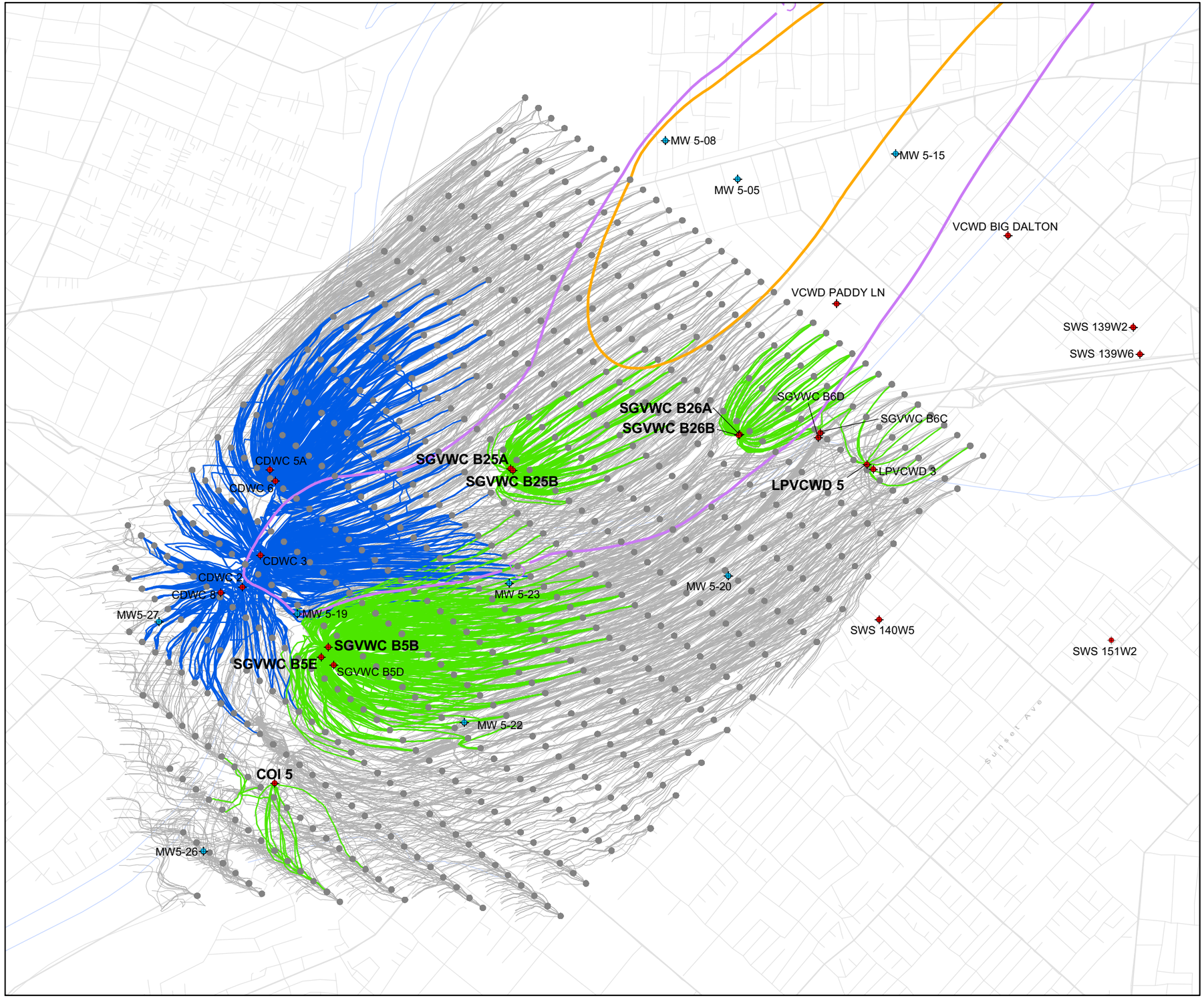
FORWARD PARTICLE TRACKS
SUBAREA 3 ABOVE -200 FEET MSL
ENDING MARCH 31, 2011
Baldwin Park Operable Unit
San Gabriel Valley, California

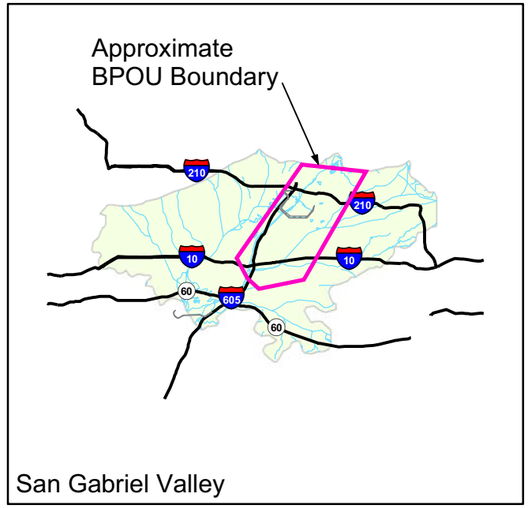
amec

Project No. 7190

Figure **5-41**

\\den-fs1\gis\Projects\Aerojet 7190\GIS_maps\Annual_Report-Particle_Tracks\20115-41_Fwd_ParticleTracks_SA3_sth_3yr_2011Q1.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval above -200 feet (5 ug/L)
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval above -200 feet (100 ug/L)

THREE-YEAR FORWARD PARTICLE TRACKS

- Track of particle
- Track of particle removed by project extraction well
- Track of particle removed by non-project extraction well
- Initial particle location

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

NOTES:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.
2. Data from the period modeled were used to create three-dimensional isoconcentration shells of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration above -200 ft MSL.
3. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

N

2,000 0 2,000

SCALE IN FEET

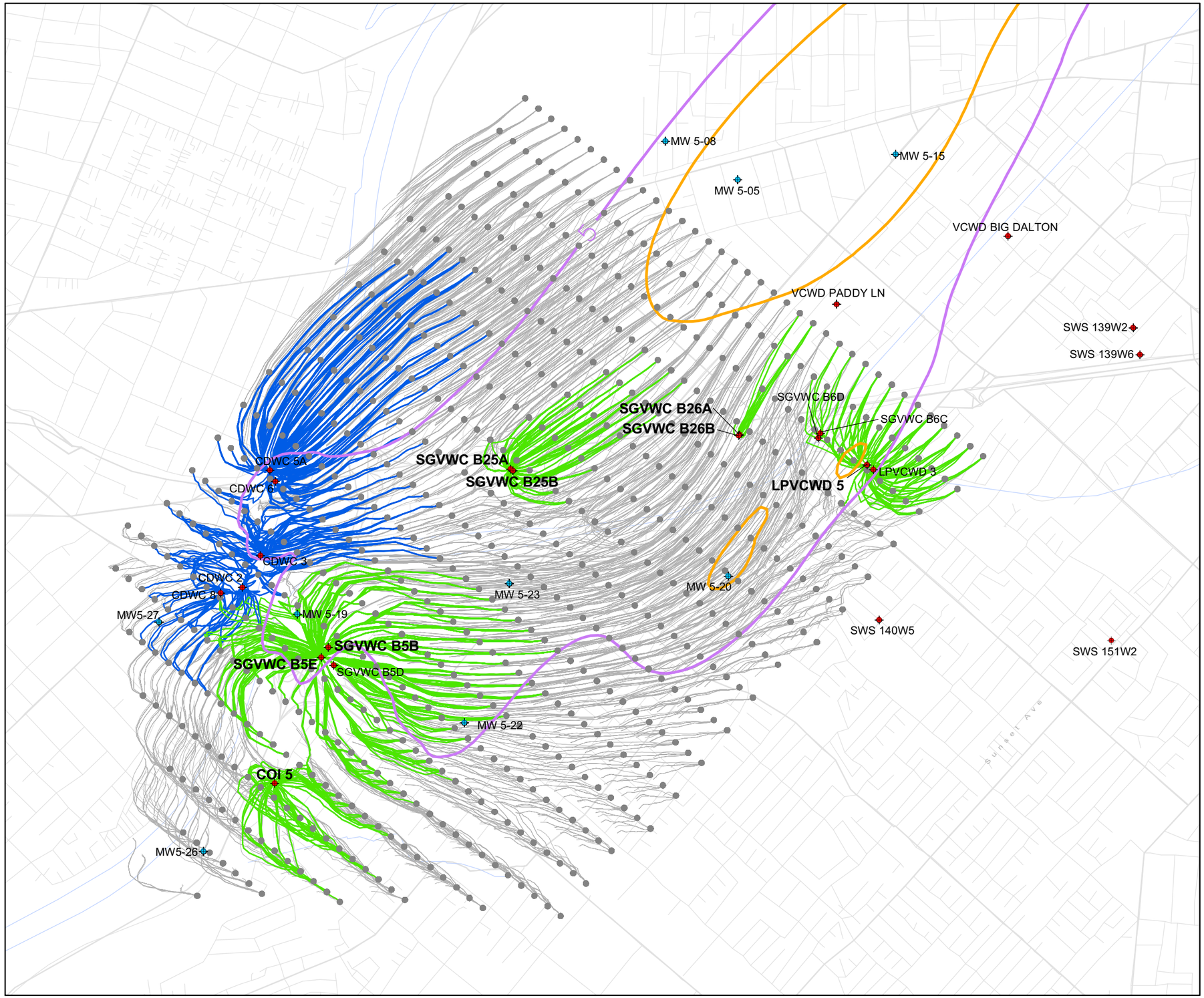
FORWARD PARTICLE TRACKS
SUBAREA 3 ABOVE -200 FEET MSL
ENDING JUNE 30, 2011
Baldwin Park Operable Unit
San Gabriel Valley, California

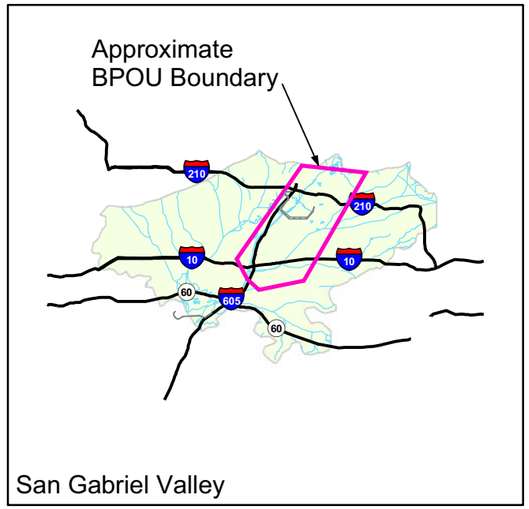
amec

Project No. 7190

Figure **5-42**

\\den-fs1\gis\Projects\Aerojet_7190\GIS_maps\Annual_Report-Particle_Tracks\201115-42_Fwd_ParticleTracks_SA3_sh_3yr_2011Q2.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval between -200 and -500 feet (5 ug/L)
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval between -200 and -500 feet (100 ug/L)

THREE-YEAR FORWARD PARTICLE TRACKS

- Track of particle
- Track of particle removed by project extraction well
- Track of particle removed by non-project extraction well
- Initial particle location

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

NOTES:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.
2. Data from the period modeled were used to create three-dimensional isoconcentration shells of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration between -200 and -500 ft MSL.
3. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

2,000 0 2,000

SCALE IN FEET

N

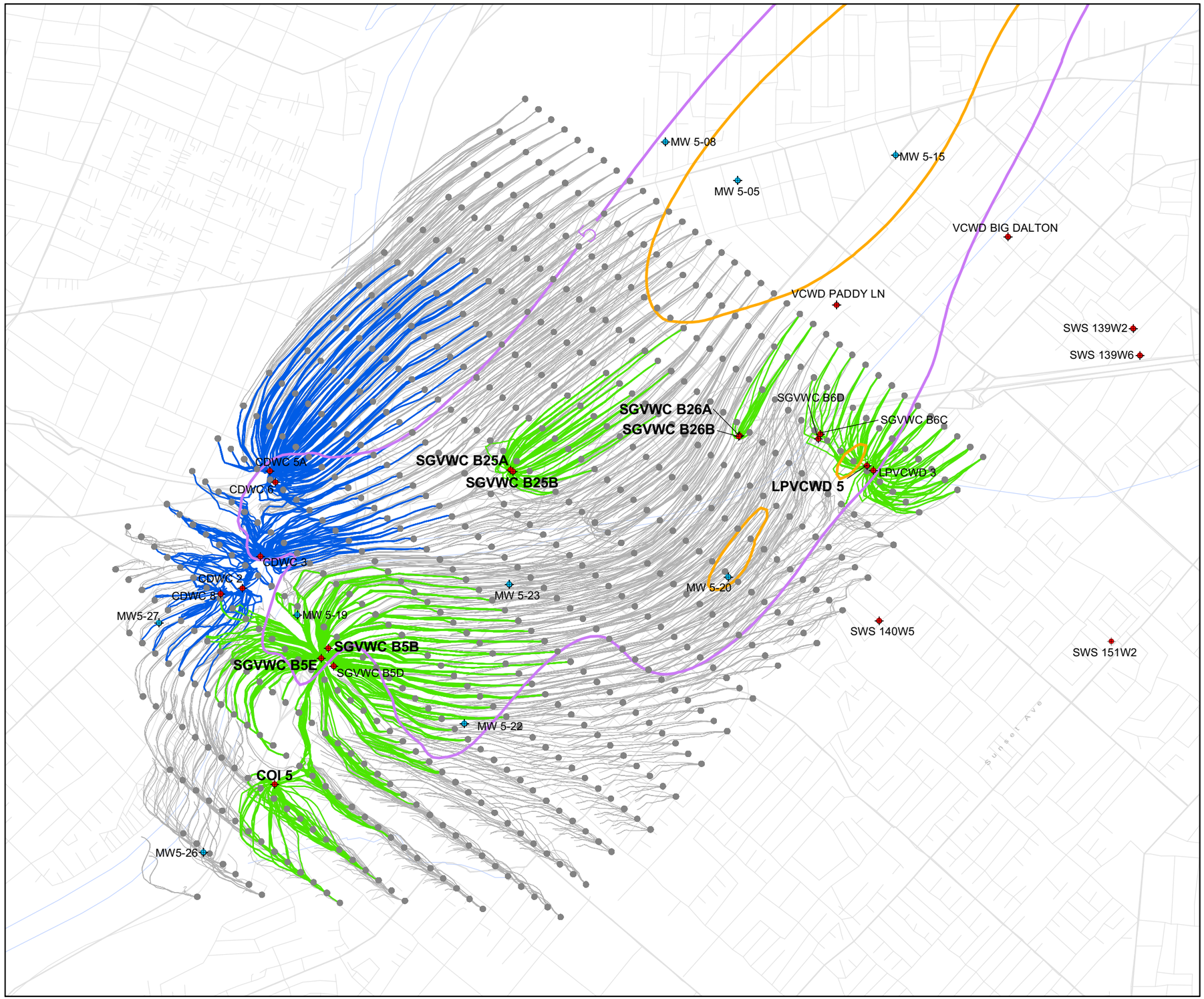
FORWARD PARTICLE TRACKS
SUBAREA 3 BETWEEN -200 AND -500 FEET MSL
ENDING SEPTEMBER 30, 2010
Baldwin Park Operable Unit
San Gabriel Valley, California

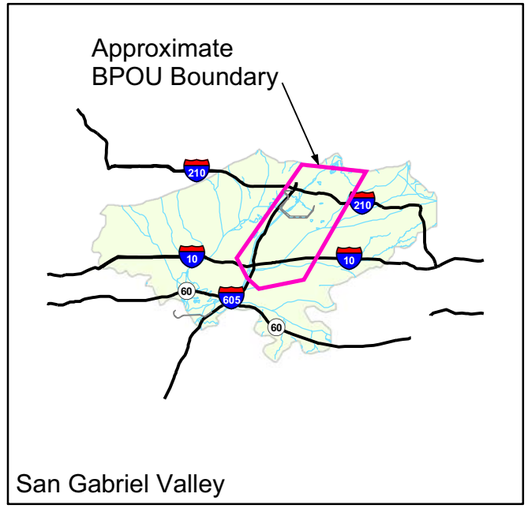
amec

Project No. 7190

Figure **5-43**

\\den-fs1\gis\Projects\Aerojet 7190\GIS_maps\Annual_Report-Particle_Tracks\201115-43_Fwd_ParticleTracks_SA3_int_3yr_2010Q3.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval between -200 and -500 feet (5 ug/L)
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval between -200 and -500 feet (100 ug/L)

THREE-YEAR FORWARD PARTICLE TRACKS

- Track of particle
- Track of particle removed by project extraction well
- Track of particle removed by non-project extraction well
- Initial particle location

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

NOTES:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.
2. Data from the period modeled were used to create three-dimensional isoconcentration shells of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration between -200 and -500 ft MSL.
3. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

N

2,000 0 2,000

SCALE IN FEET

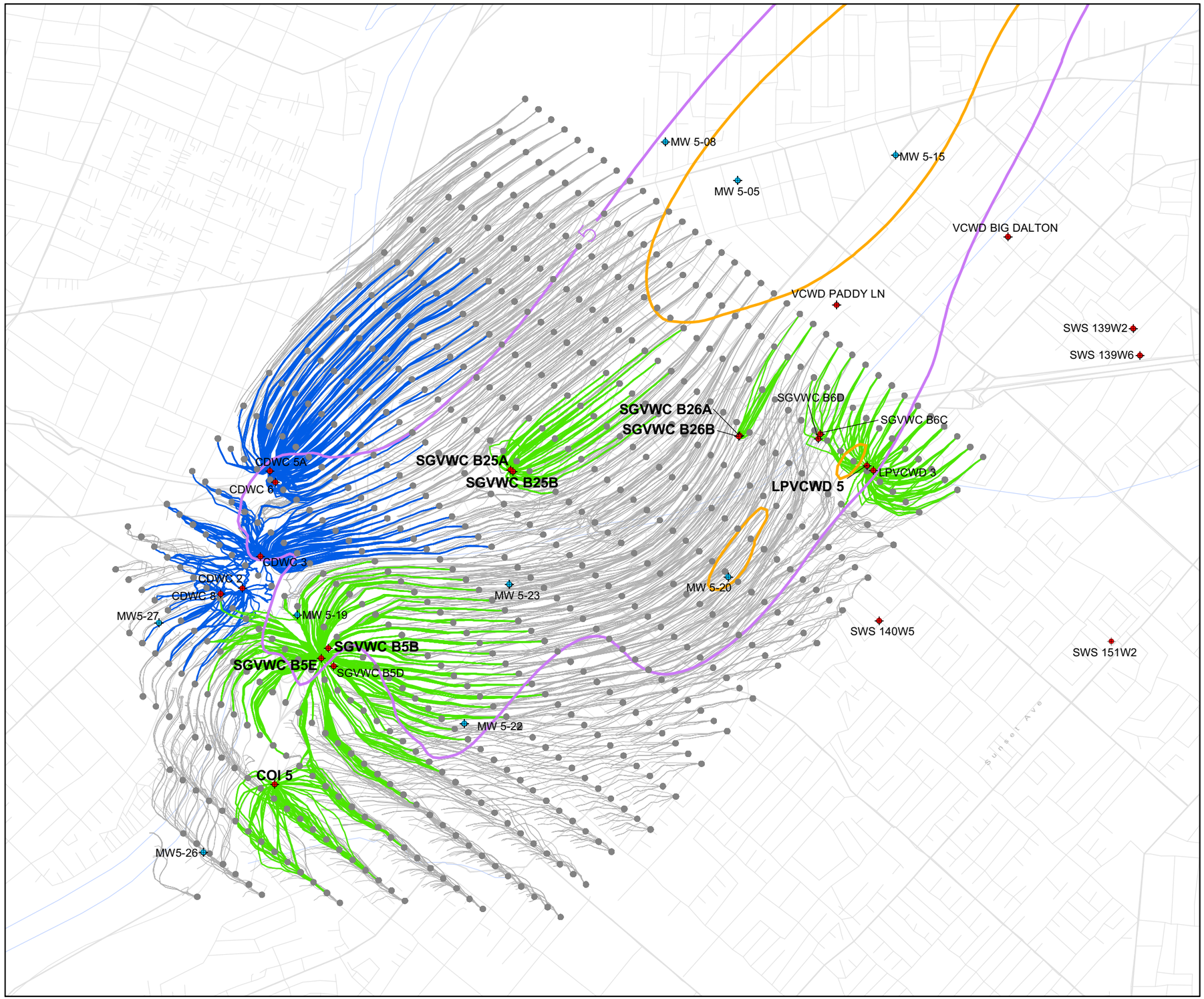
FORWARD PARTICLE TRACKS
SUBAREA 3 BETWEEN -200 AND -500 FEET MSL
ENDING DECEMBER 31, 2010
Baldwin Park Operable Unit
San Gabriel Valley, California

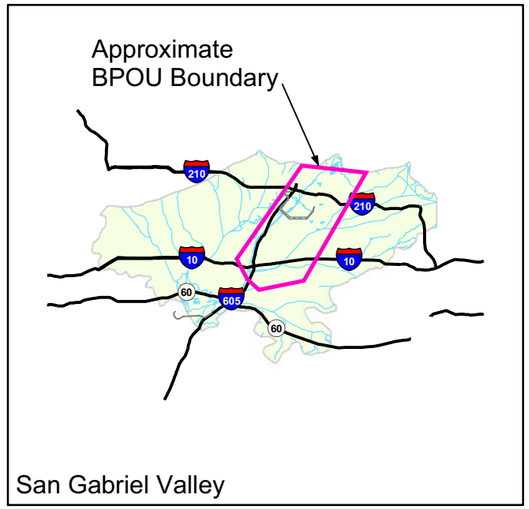
amec

Project No. 7190

Figure **5-44**

\\den-fs1\gis\Projects\Aerojet_7190\GIS_maps\Annual_Report-Particle_Tracks\201115-44_Fwd_ParticleTracks_SA3_int_3yr_2010Q4.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval between -200 and -500 feet (5 ug/L)
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval between -200 and -500 feet (100 ug/L)

THREE-YEAR FORWARD PARTICLE TRACKS

- Track of particle
- Track of particle removed by project extraction well
- Track of particle removed by non-project extraction well
- Initial particle location

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

NOTES:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.
2. Data from the period modeled were used to create three-dimensional isoconcentration shells of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration between -200 and -500 ft MSL.
3. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

2,000 0 2,000

SCALE IN FEET

N

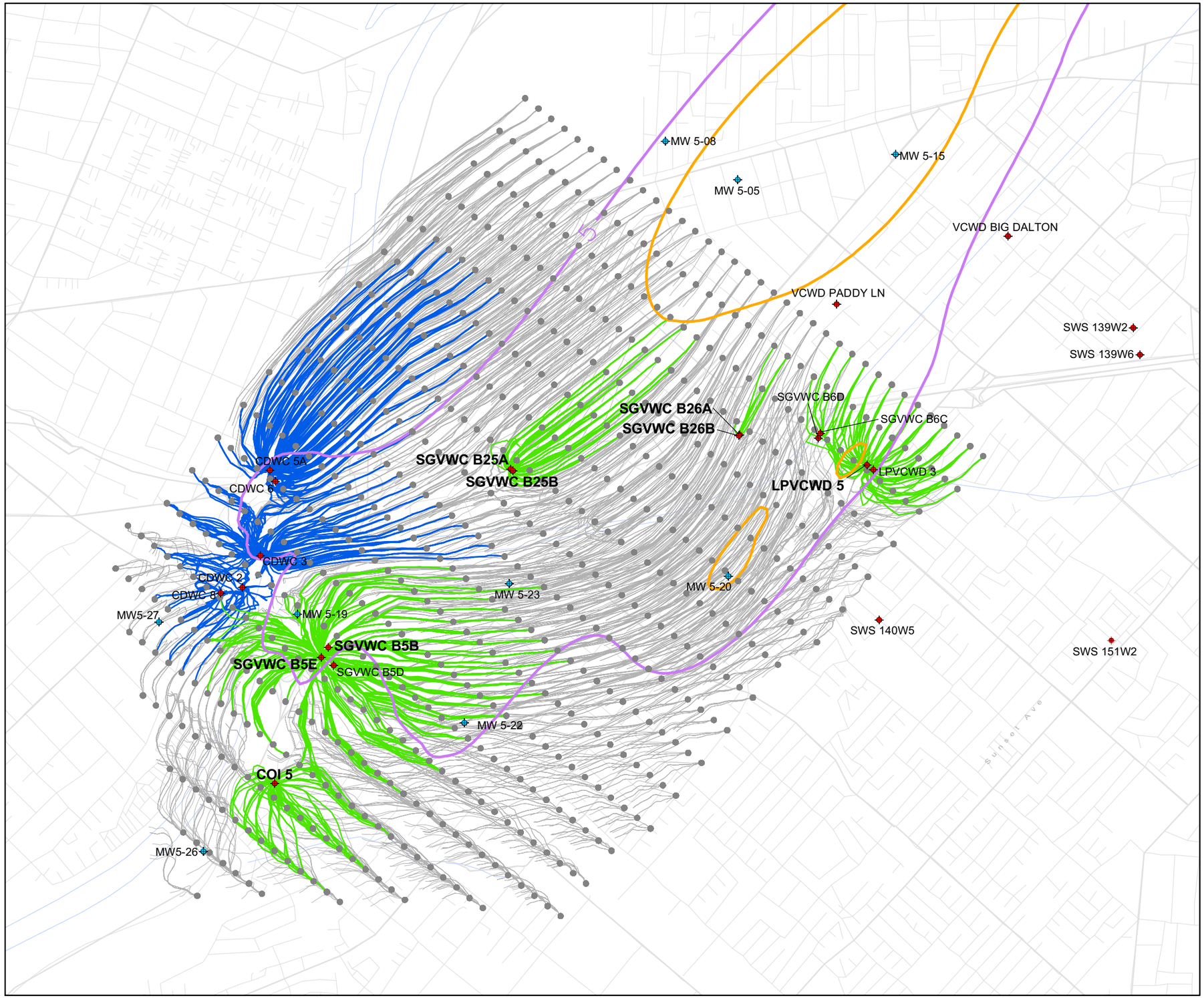
FORWARD PARTICLE TRACKS
SUBAREA 3 BETWEEN -200 AND -500 FEET MSL
ENDING MARCH 31, 2011
Baldwin Park Operable Unit
San Gabriel Valley, California

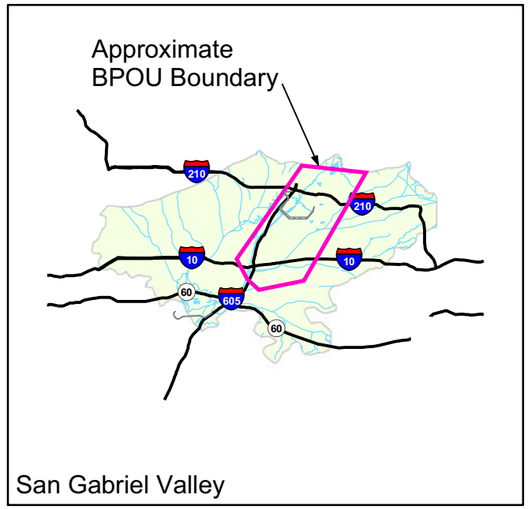
amec

Project No. 7190

Figure 5-45

\\den-fs1\gis\Projects\Aerojet 7190\GIS maps\Annual Report-Particle Tracks\201115-45 Fwd ParticleTracks SA3 int 3yr 2011Q1.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval between -200 and -500 feet (5 ug/L)
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval between -200 and -500 feet (100 ug/L)

THREE-YEAR FORWARD PARTICLE TRACKS

- Track of particle
- Track of particle removed by project extraction well
- Track of particle removed by non-project extraction well
- Initial particle location

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

NOTES:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.
2. Data from the period modeled were used to create three-dimensional isoconcentration shells of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration between -200 and -500 ft MSL.
3. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

2,000 0 2,000

SCALE IN FEET

N

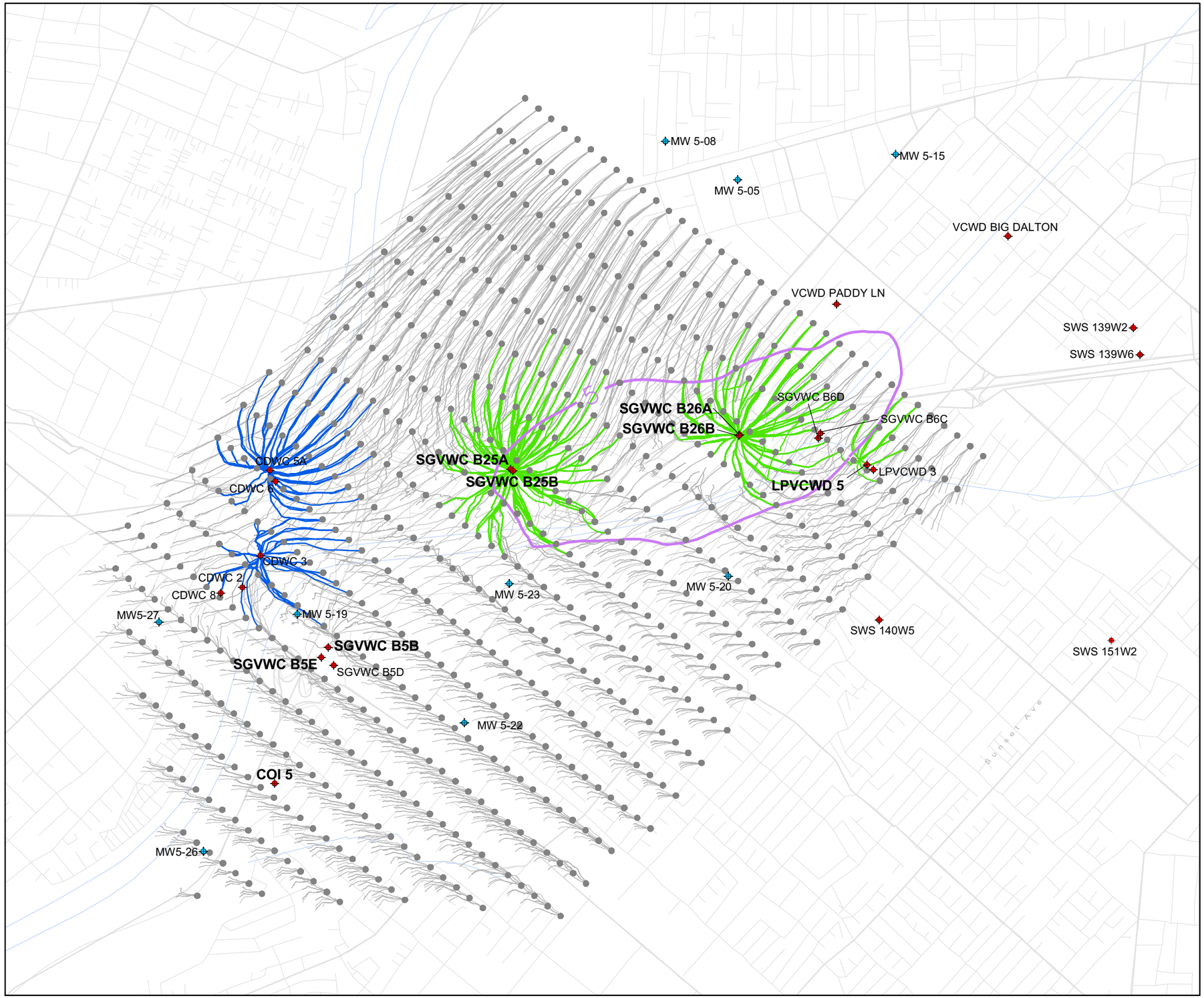
FORWARD PARTICLE TRACKS
SUBAREA 3 BETWEEN -200 AND -500 FEET MSL
ENDING JUNE 30, 2011
Baldwin Park Operable Unit
San Gabriel Valley, California

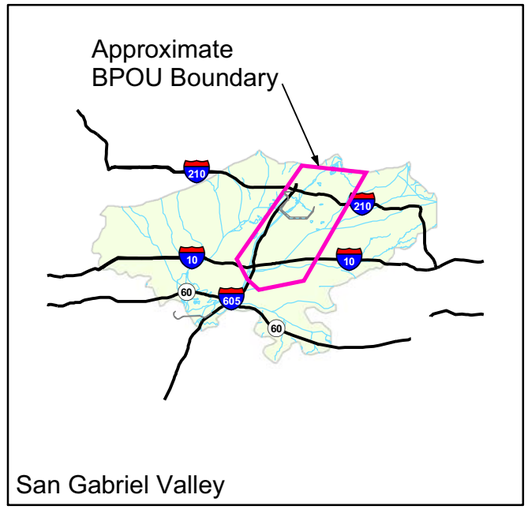
amec

Project No. 7190

Figure **5-46**

\\den-fs1\gis\Projects\Aerojet 7190\GIS_maps\Annual_Report-Particle_Tracks\20115-46_Fwd_ParticleTracks_SA3_int_3yr_20110Z.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval below -500 feet (5 ug/L)
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval below -500 feet (100 ug/L)

THREE-YEAR FORWARD PARTICLE TRACKS

- Track of particle
- Track of particle removed by project extraction well
- Track of particle removed by non-project extraction well
- Initial particle location

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

NOTES:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.
2. Data from the period modeled were used to create three-dimensional isoconcentration shells of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration below -500 ft MSL.
3. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

2,000 0 2,000

SCALE IN FEET

N

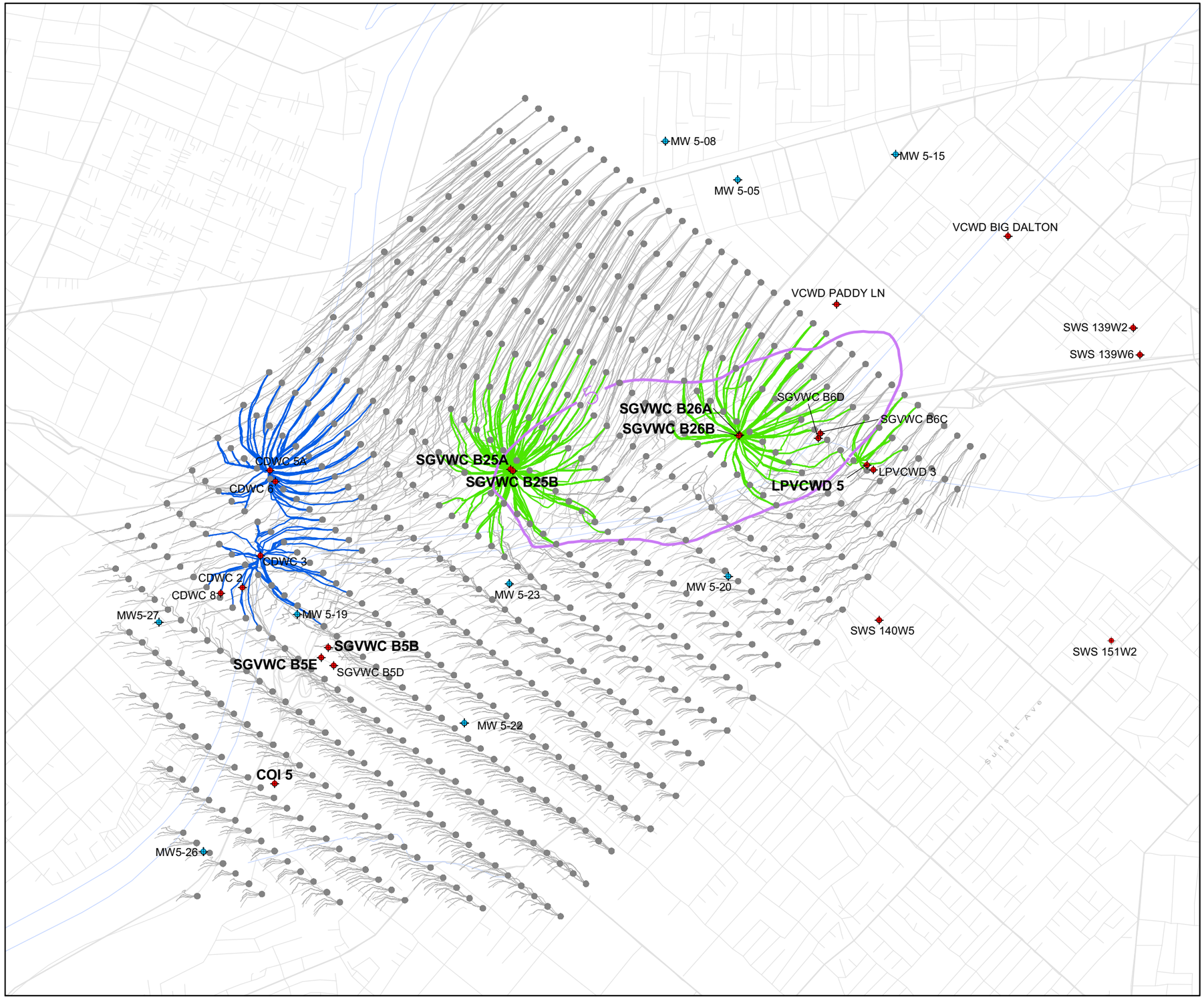
FORWARD PARTICLE TRACKS
SUBAREA 3 BELOW -500 FEET MSL
ENDING SEPTEMBER 30, 2010
Baldwin Park Operable Unit
San Gabriel Valley, California

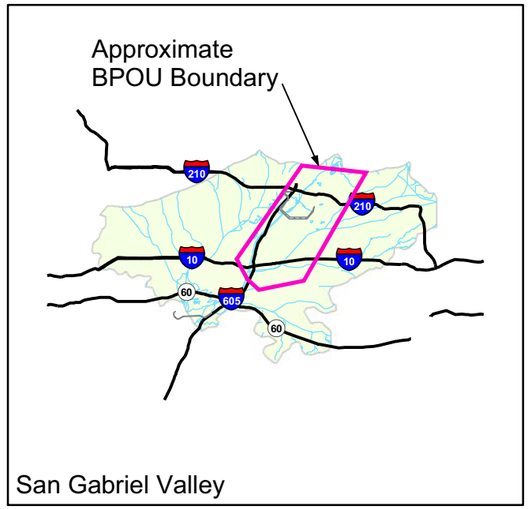
amec

Project No. 7190

Figure **5-47**

\\den-fs1\gis\Projects\Aerojet_7190\GIS_maps\Annual_Report-Particle_Tracks\20115-47_Fwd_ParticleTracks_SA3_dp_3yr_2010Q3.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval below -500 feet (5 ug/L)
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval below -500 feet (100 ug/L)

THREE-YEAR FORWARD PARTICLE TRACKS

- Track of particle
- Track of particle removed by project extraction well
- Track of particle removed by non-project extraction well
- Initial particle location

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

NOTES:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.
2. Data from the period modeled were used to create three-dimensional isoconcentration shells of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration below -500 ft MSL.
3. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

2,000 0 2,000

SCALE IN FEET

N

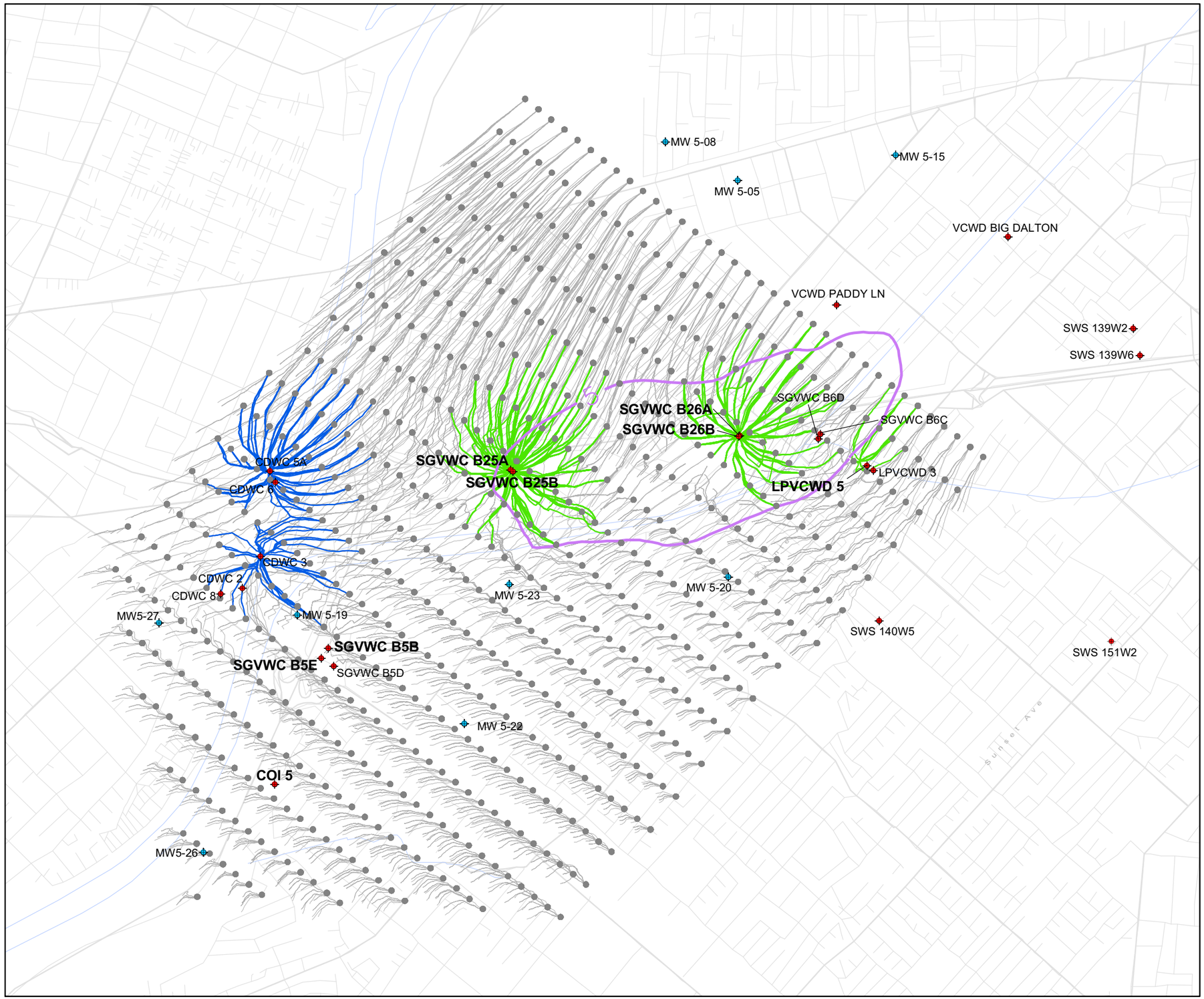
FORWARD PARTICLE TRACKS
SUBAREA 3 BELOW -500 FEET MSL
ENDING DECEMBER 31, 2010
Baldwin Park Operable Unit
San Gabriel Valley, California

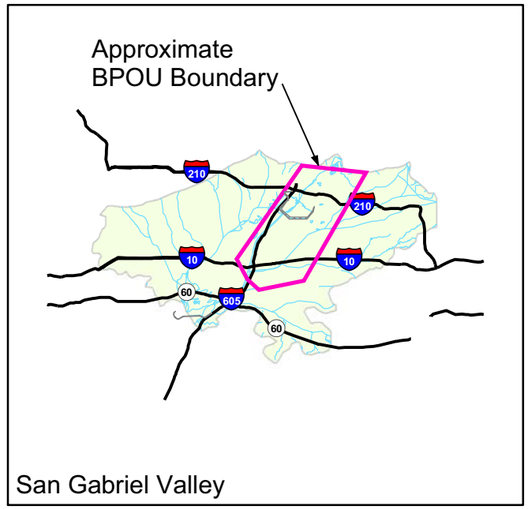
amec

Project No. 7190

Figure **5-48**

\\den-fs1\gis\Projects\Aerojet 7190\GIS_maps\Annual_Report-Particle_Tracks\20115-48_Fwd_ParticleTracks_SA3_dp_3yr_2010Q4.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval below -500 feet (5 ug/L)
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval below -500 feet (100 ug/L)

THREE-YEAR FORWARD PARTICLE TRACKS

- Track of particle
- Track of particle removed by project extraction well
- Track of particle removed by non-project extraction well
- Initial particle location

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

NOTES:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.
2. Data from the period modeled were used to create three-dimensional isoconcentration shells of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration below -500 ft MSL.
3. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

N

2,000 0 2,000

SCALE IN FEET

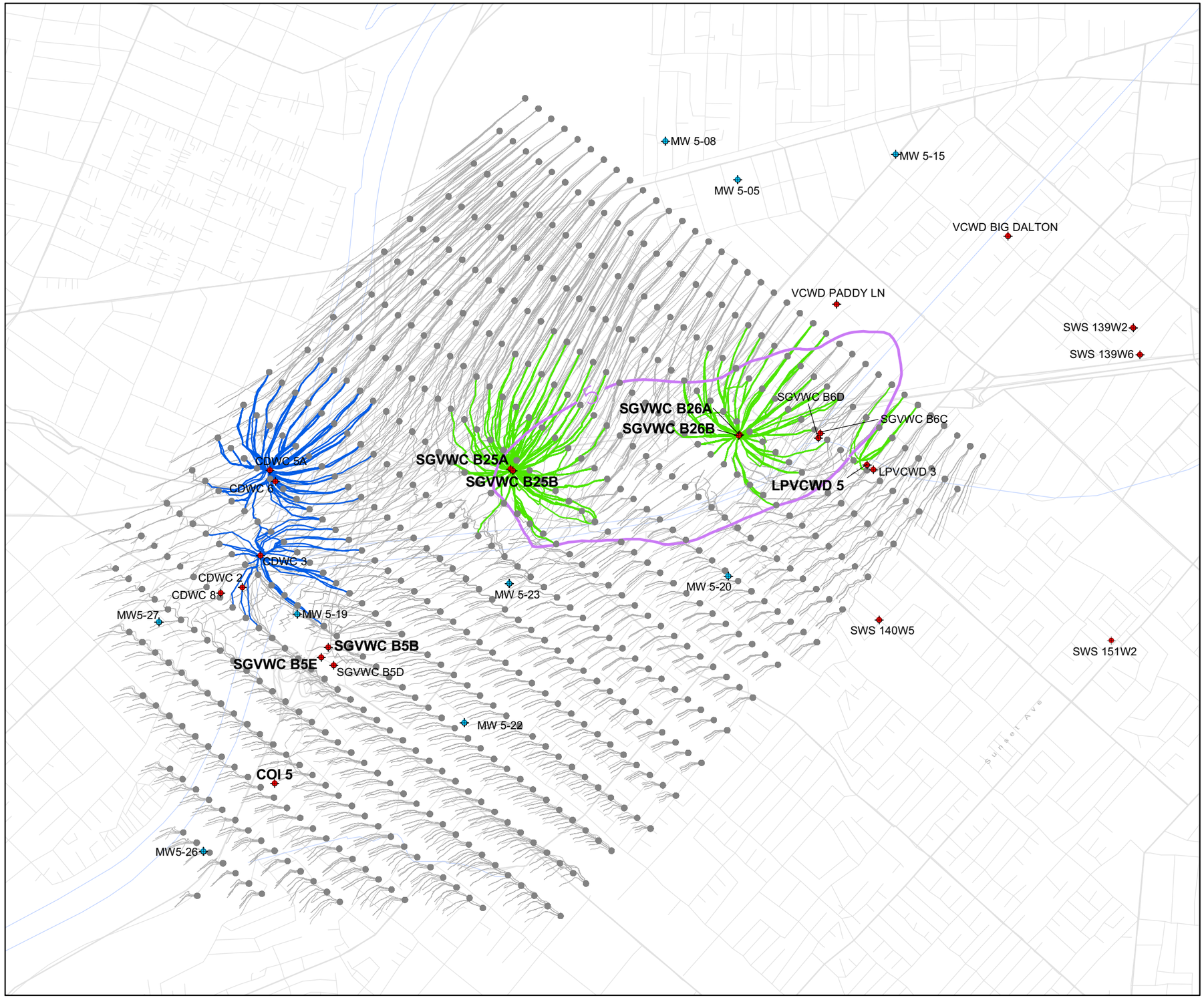
FORWARD PARTICLE TRACKS
SUBAREA 3 BELOW -500 FEET MSL
ENDING MARCH 31, 2011
Baldwin Park Operable Unit
San Gabriel Valley, California

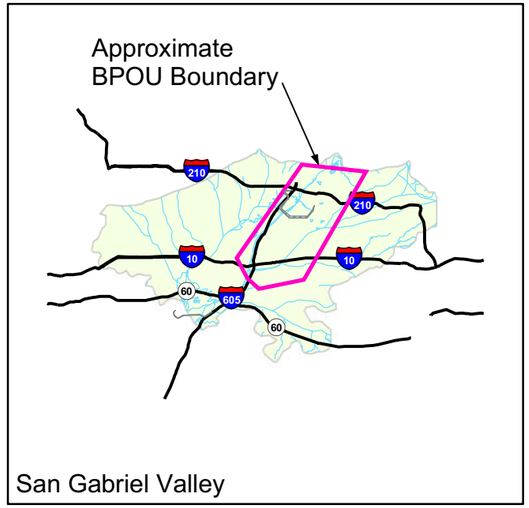
amec

Project No. 7190

Figure **5-49**

\\den-fs1\gis\Projects\Aerojet_7190\GIS_maps\Annual_Report-Particle_Tracks\20115-49_Fwd_ParticleTracks_SA3_dp_3yr_2011Q1.mxd





EXPLANATION

- Production well
- Monitoring or multiport well
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval below -500 feet (5 ug/L)
- 2011 Trichloroethene composite isoconcentration contour for the elevation interval below -500 feet (100 ug/L)

THREE-YEAR FORWARD PARTICLE TRACKS

- Track of particle
- Track of particle removed by project extraction well
- Track of particle removed by non-project extraction well
- Initial particle location

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

NOTES:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.
2. Data from the period modeled were used to create three-dimensional isoconcentration shells of the contaminant. The isoconcentration contours represent the estimated maximum extent of contours of equal concentration below -500 ft MSL.
3. The isoconcentration contours were generated using the three-dimensional geospatial modeling software, EarthVision®.

N

2,000 0 2,000

SCALE IN FEET

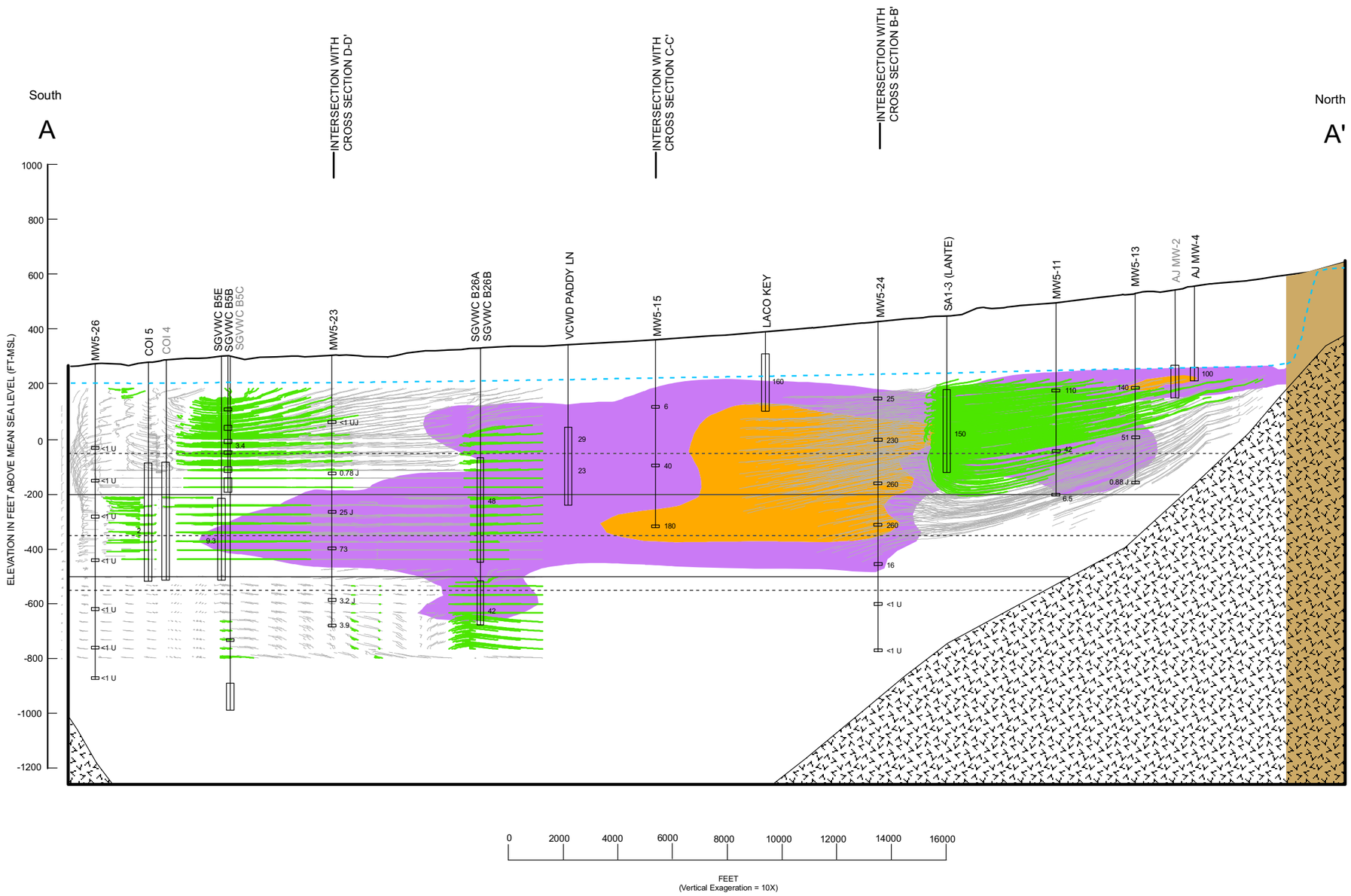
FORWARD PARTICLE TRACKS
SUBAREA 3 BELOW -500 FEET MSL
ENDING JUNE 30, 2011
Baldwin Park Operable Unit
San Gabriel Valley, California

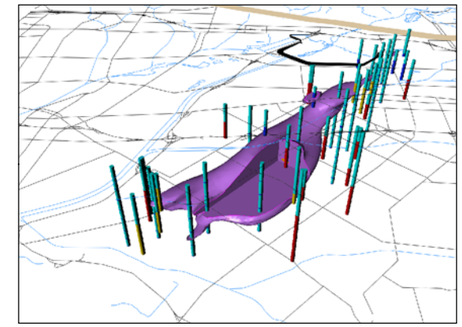
amec

Project No. 7190

Figure **5-50**

\\den-fs1\gis\Projects\Aerojet_7190\GIS_maps\Annual_Report-Particle_Tracks\201115-50_Fwd_ParticleTracks_SA3_dp_3yr_2011Q2.mxd





Three Dimensional Isoconcentration Shell at the MCL or Action Level

EXPLANATION

Data unavailable within the date range modeled

Well name

COI 4 COI 5

Blank casing

Perforated casing

May 2011 generalized potentiometric surface (BPOU groundwater model)

Bedrock surface used in BPOU groundwater model based on California DWR Bulletin 104-2, Plate 11, and updated with drilling information from various sources

Model representation of separating sequence

Duarte fault zone

2011 Trichloroethene >5 ug/L

2011 Trichloroethene >100 ug/L

Three-year forward particle tracks

Track of particle

Track of particle removed by project extraction well

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

Note:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.

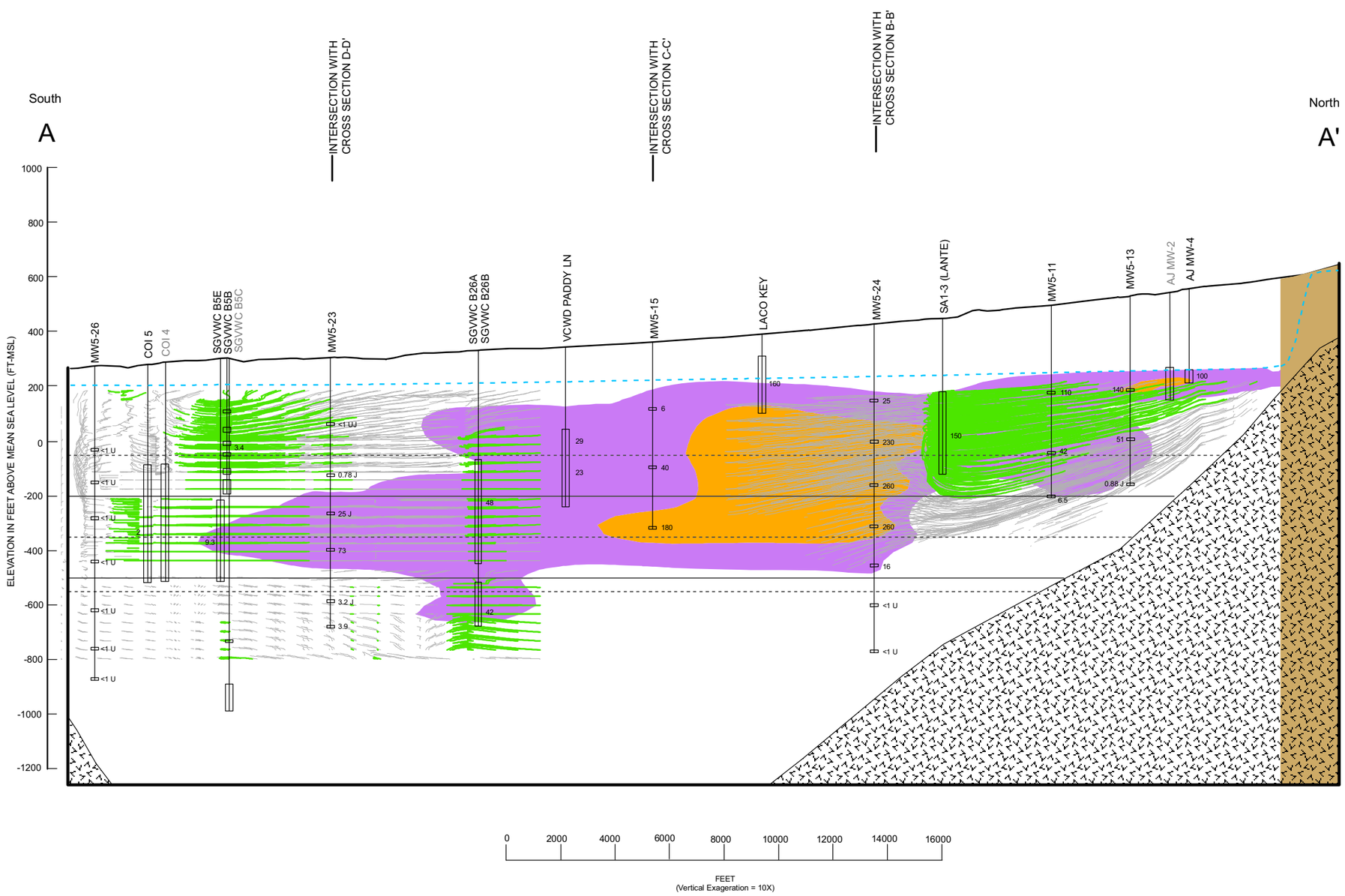
FORWARD PARTICLE TRACKS
ENDING SEPTEMBER 30, 2010
ON CROSS SECTION A-A'
Baldwin Park Operable Unit
San Gabriel Valley, California

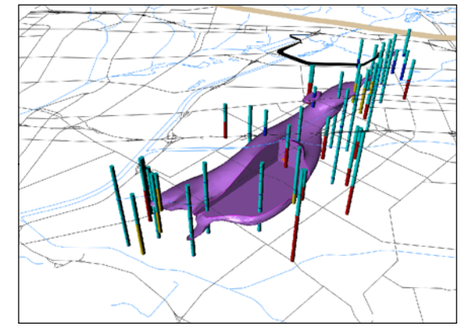
amec

Project No. 7190

Figure **5-51**

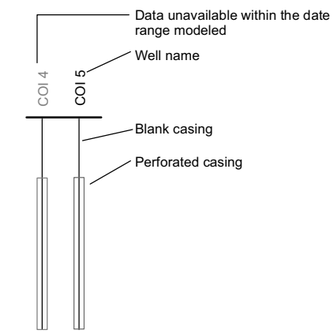
\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual_Report-Particle_Tracks\201115-51_Fwd_ParticleTracks_XSect_3yr_2010Q3.mxd





Three Dimensional Isoconcentration Shell at the MCL or Action Level

EXPLANATION



May 2011 generalized potentiometric surface (BPOU groundwater model)

Bedrock surface used in BPOU groundwater model based on California DWR Bulletin 104-2, Plate 11, and updated with drilling information from various sources

Model representation of separating sequence

Duarte fault zone

2011 Trichloroethene >5 ug/L

2011 Trichloroethene >100 ug/L

Three-year forward particle tracks

Track of particle

Track of particle removed by project extraction well

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

Note:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.

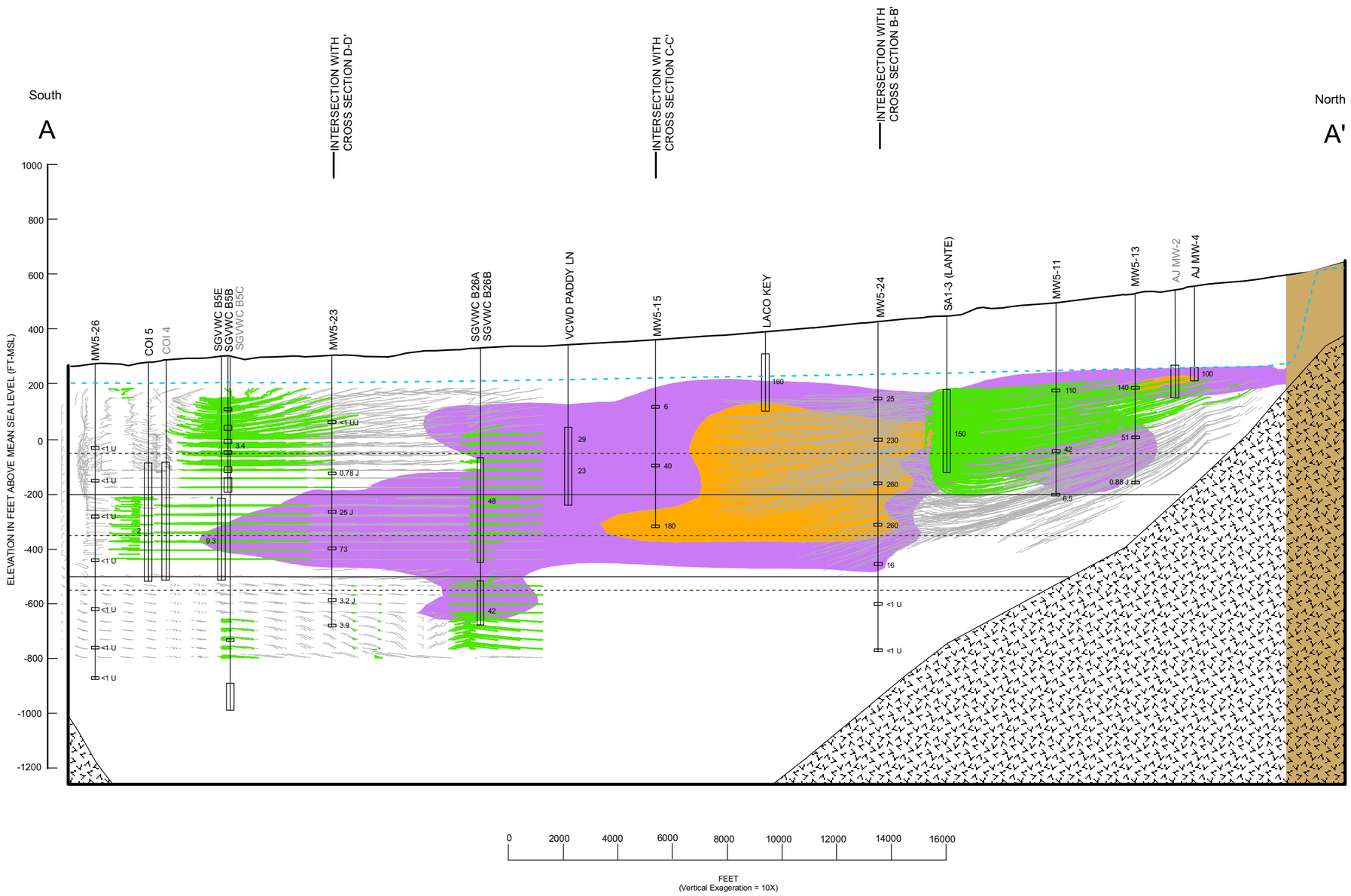
FORWARD PARTICLE TRACKS
ENDING DECEMBER 31, 2010
ON CROSS SECTION A-A'
Baldwin Park Operable Unit
San Gabriel Valley, California

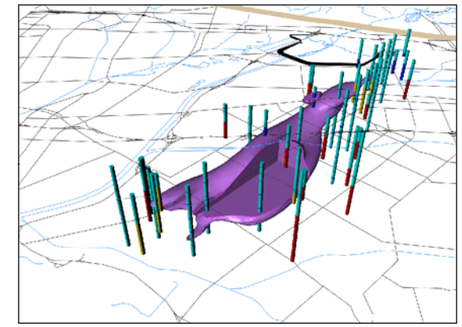
amec

Project No. 7190

Figure **5-52**

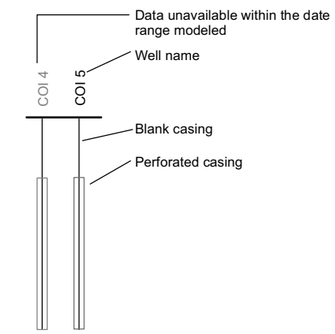
\\den-fs1\gis\Projects\AerojetL_7190\GIS_maps\Annual_Report-Particle_Tracks\201115-52_Fwd_ParticleTracks_XSect_3yr_2010Q4.mxd





Three Dimensional Isoconcentration Shell at the MCL or Action Level

EXPLANATION



May 2011 generalized potentiometric surface (BPOU groundwater model)

Bedrock surface used in BPOU groundwater model based on California DWR Bulletin 104-2, Plate 11, and updated with drilling information from various sources

Model representation of separating sequence

Duarte fault zone

2011 Trichloroethene >5 ug/L

2011 Trichloroethene >100 ug/L

Three-year forward particle tracks

Track of particle

Track of particle removed by project extraction well

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

Note:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.

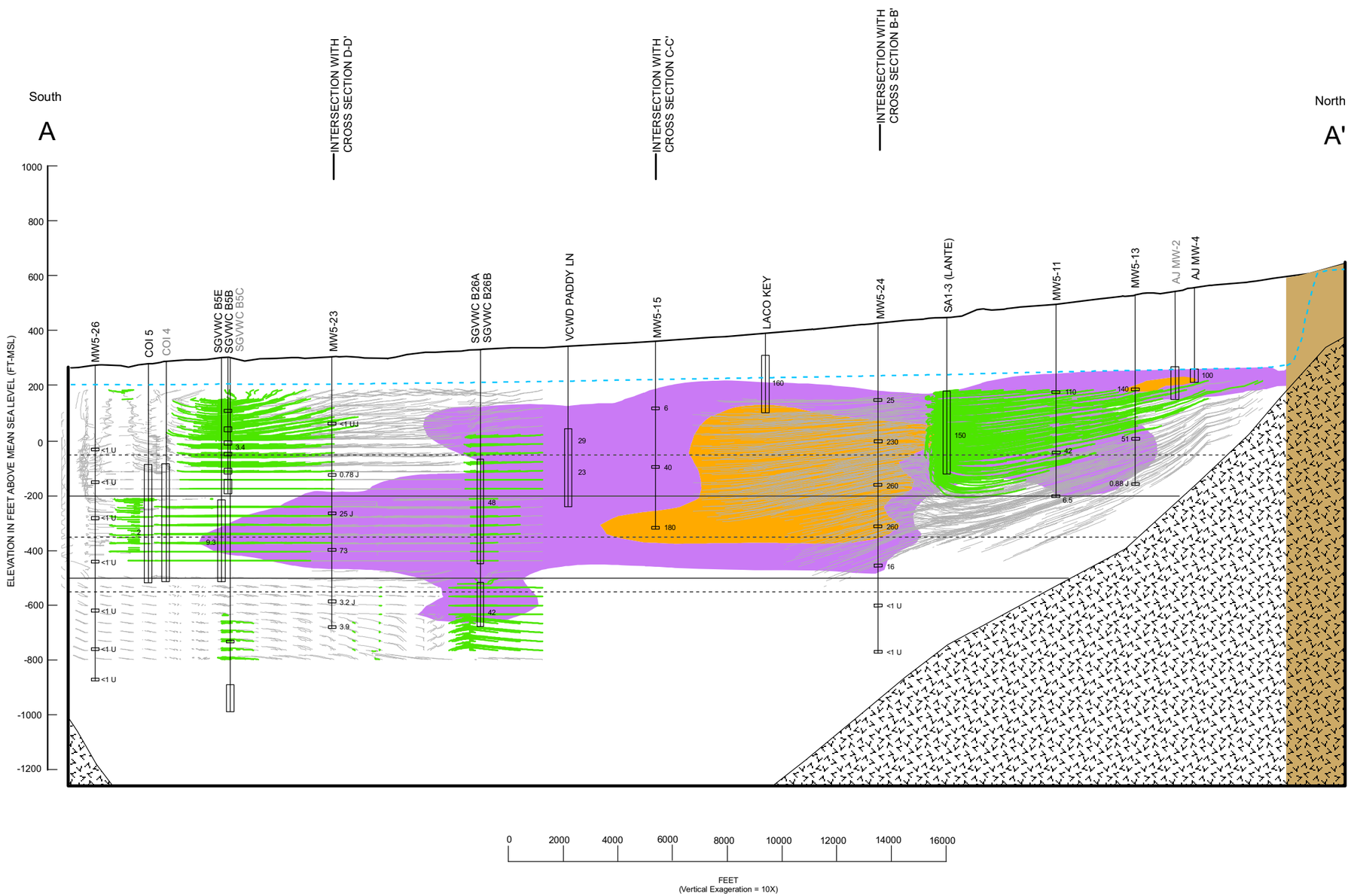
FORWARD PARTICLE TRACKS
ENDING MARCH 31, 2011
ON CROSS SECTION A-A'
Baldwin Park Operable Unit
San Gabriel Valley, California

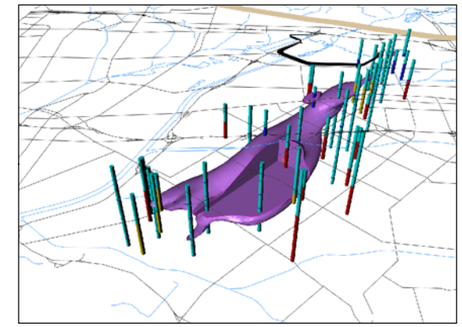
amec

Project No. 7190

Figure **5-53**

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual_Report-Particle_Tracks\201115-53_Fwd_ParticleTracks_XSect_3yr_2011Q1.mxd





Three Dimensional Isoconcentration Shell at the MCL or Action Level

EXPLANATION

- Data unavailable within the date range modeled
- Well name
- Blank casing
- Perforated casing
- May 2011 generalized potentiometric surface (BPOU groundwater model)
- Bedrock surface used in BPOU groundwater model based on California DWR Bulletin 104-2, Plate 11, and updated with drilling information from various sources
- Model representation of separating sequence
- Duarte fault zone
- 2011 Trichloroethene >5 ug/L
- 2011 Trichloroethene >100 ug/L

Three-year forward particle tracks

- Track of particle
- Track of particle removed by project extraction well

The forward particle tracking is not intended to display actual contaminant sources nor the actual locations where "initial particles" of contamination were originally released into groundwater. The particles do not represent contaminant mass; rather, they solely represent imaginary particles of groundwater in order to depict the likely zones of capture as the particles move downgradient through the groundwater. The modeling results in this figure cannot be utilized to infer, suggest, or demonstrate the source of any contamination with any degree of precision.

Note:

1. Three-year particle tracks based on transient flow field through the end of each quarterly period shown.

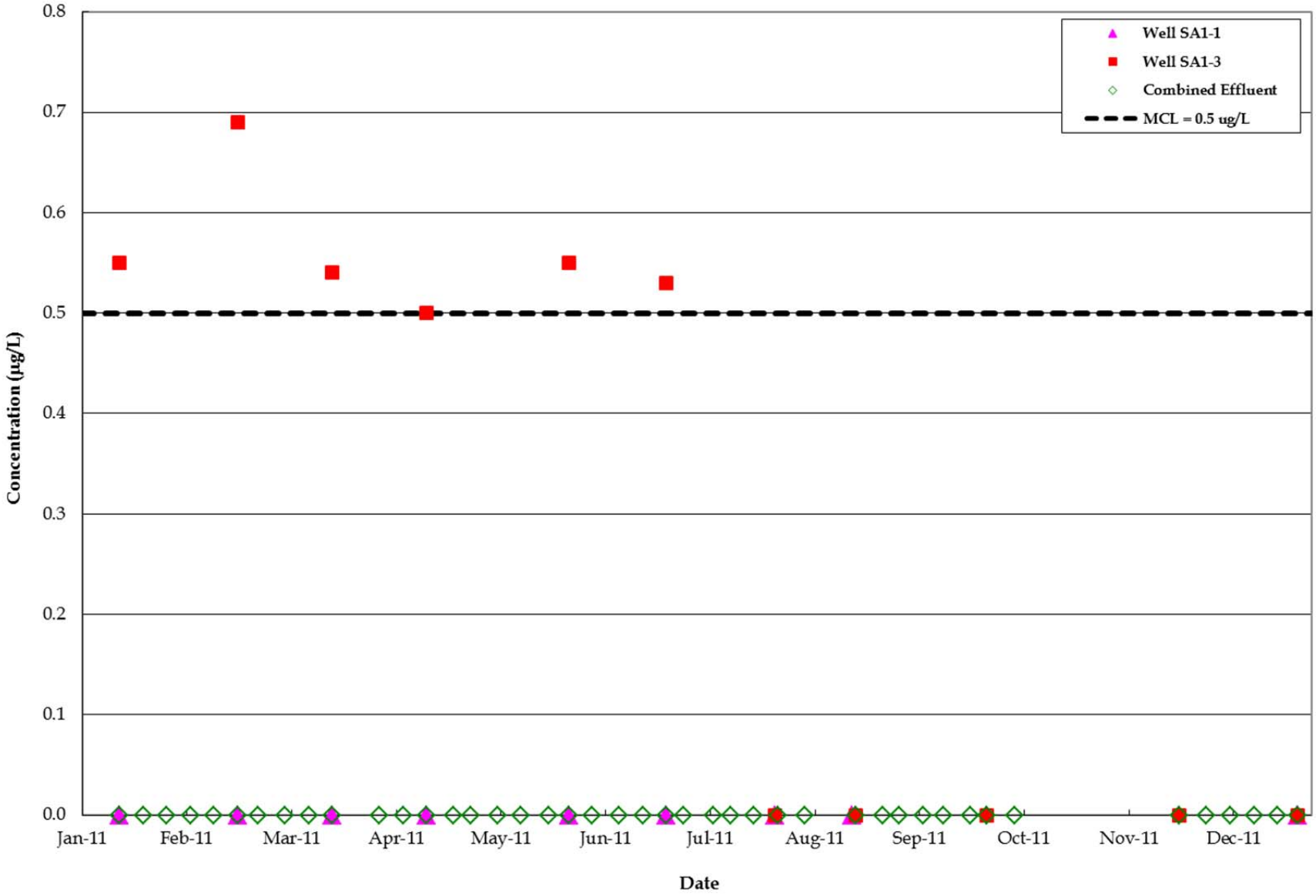
FORWARD PARTICLE TRACKS
ENDING JUNE 30, 2011
ON CROSS SECTION A-A'
Baldwin Park Operable Unit
San Gabriel Valley, California

amec

Project No. 7190

Figure **5-54**

\\den-fs1\GIS\Projects\Aerojet_7190\GIS_maps\Annual_Report-Particle_Tracks\20115-54_Fwd_ParticleTracks_XSect_3yr_2011Q2.mxd

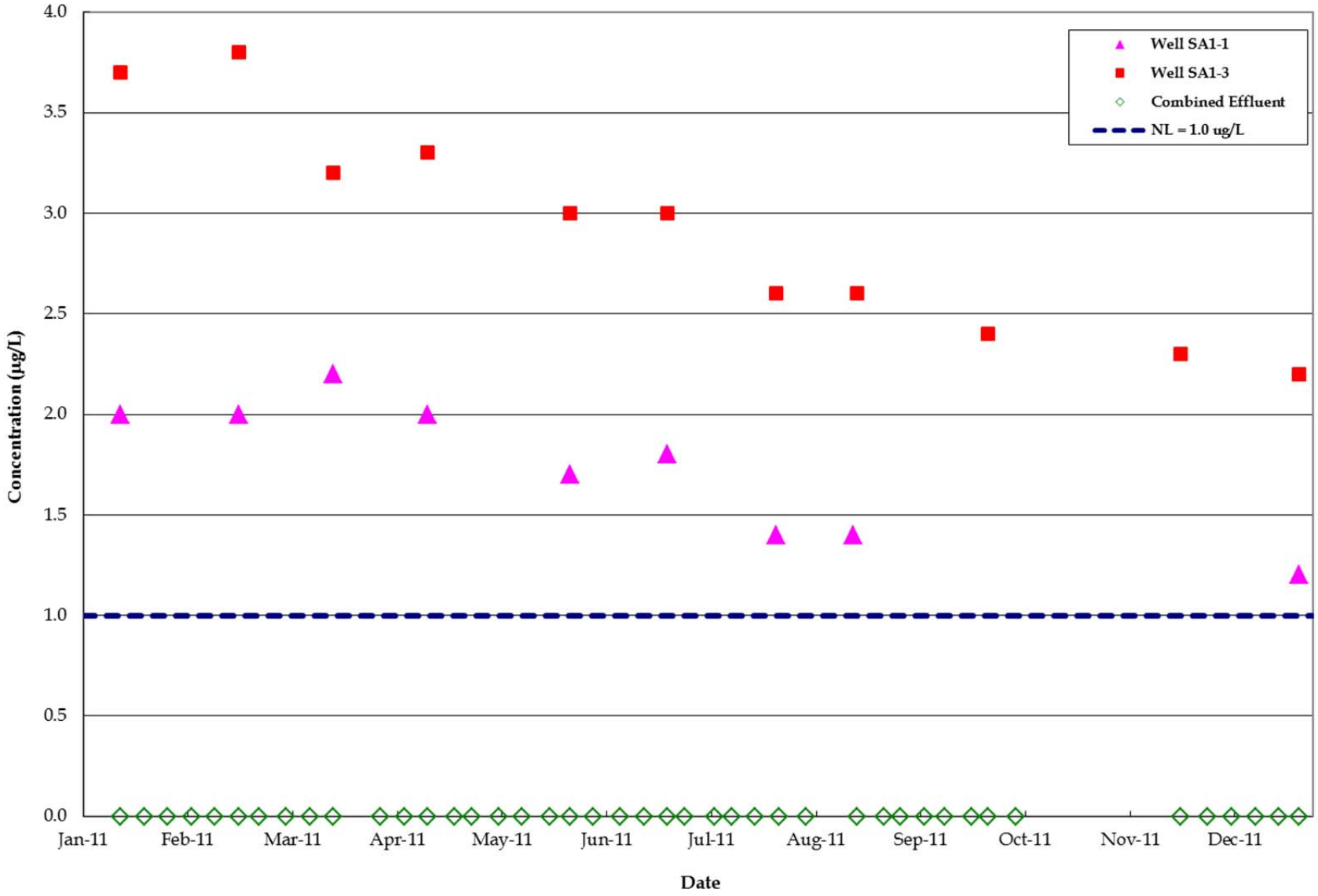


ERM

1,2-DICHLOROETHANE CONCENTRATIONS, RAW AND TREATED WATER FOR
VALLEY COUNTY WATER DISTRICT LANTE TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-1

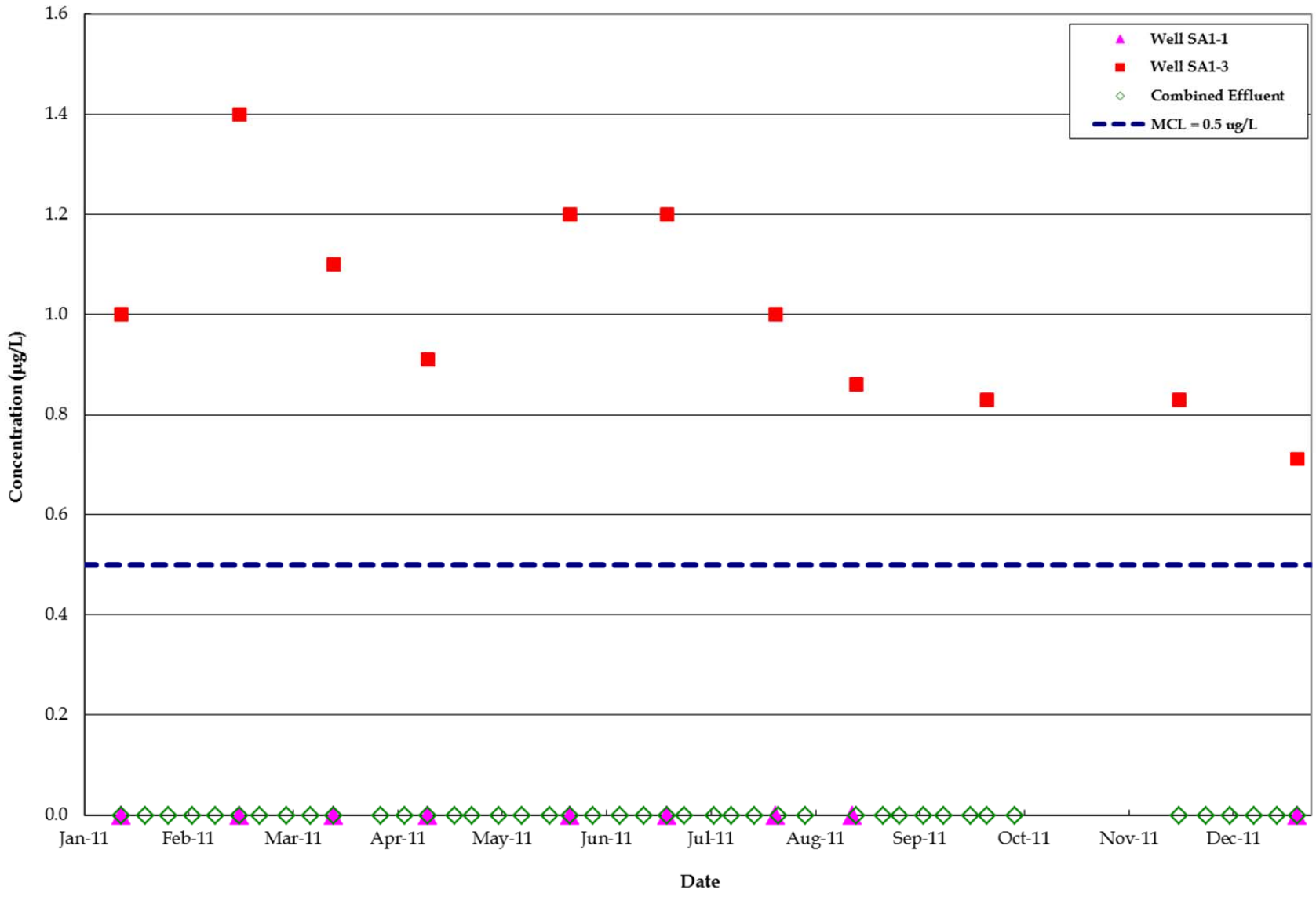


ERM

1,4-DIOXANE CONCENTRATIONS, RAW AND TREATED WATER FOR
VALLEY COUNTY WATER DISTRICT LANTE TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-2

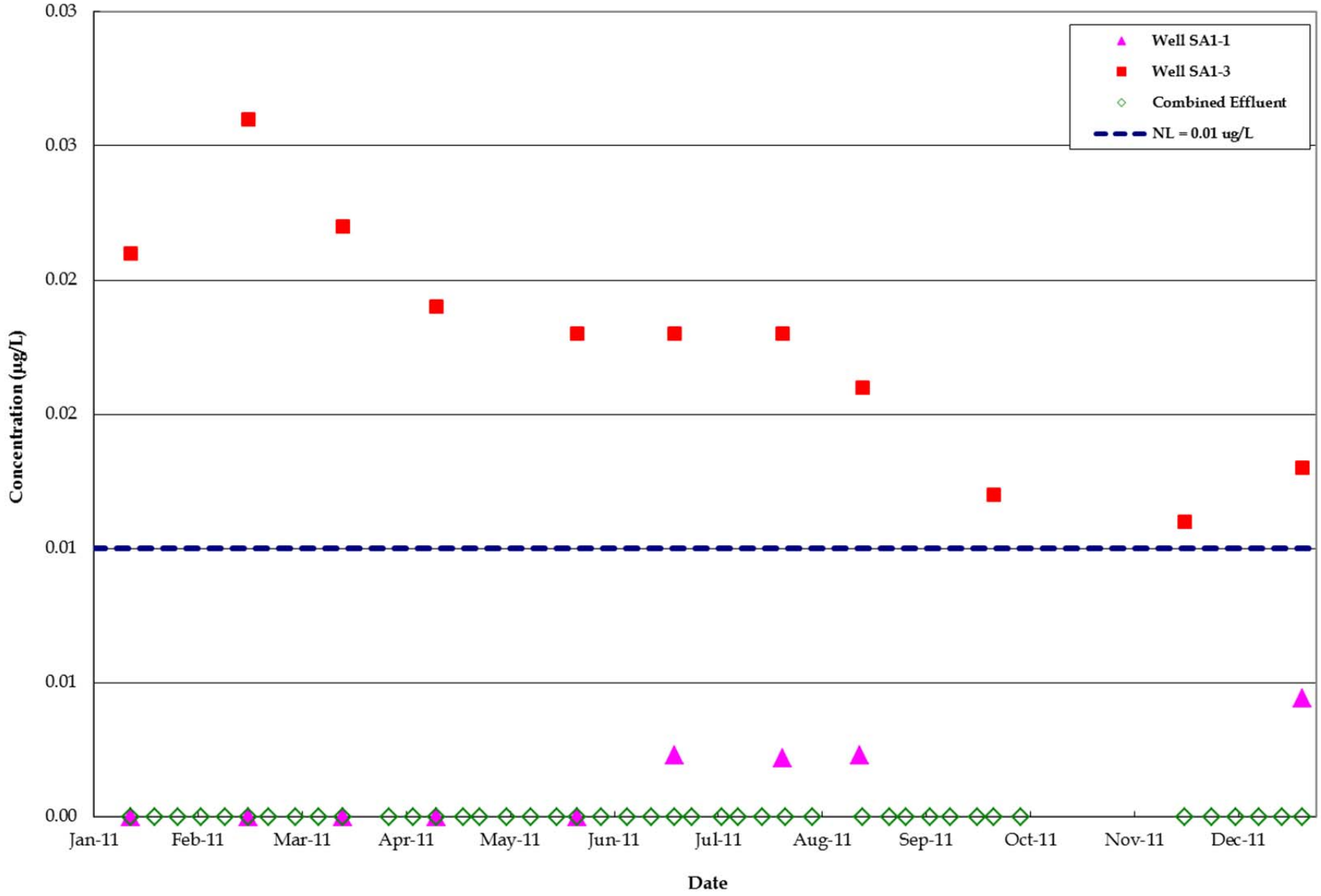


ERM

CARBON TETRACHLORIDE CONCENTRATIONS, RAW AND TREATED WATER FOR VALLEY COUNTY WATER DISTRICT LANTE TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-3

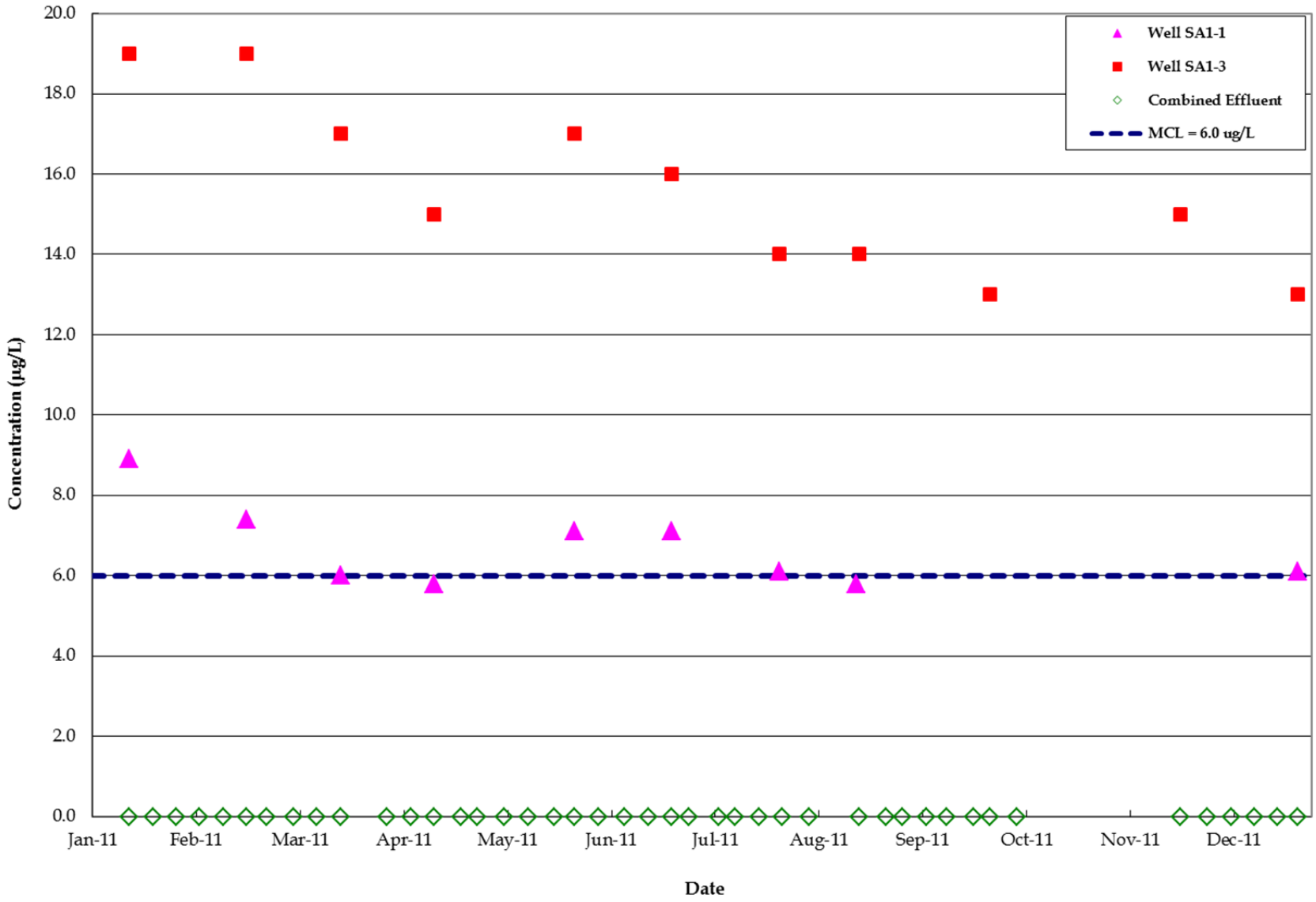


ERM

N-NITROSODIMETHYLAMINE CONCENTRATIONS, RAW AND TREATED WATER FOR VALLEY COUNTY WATER DISTRICT LANTE TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-4

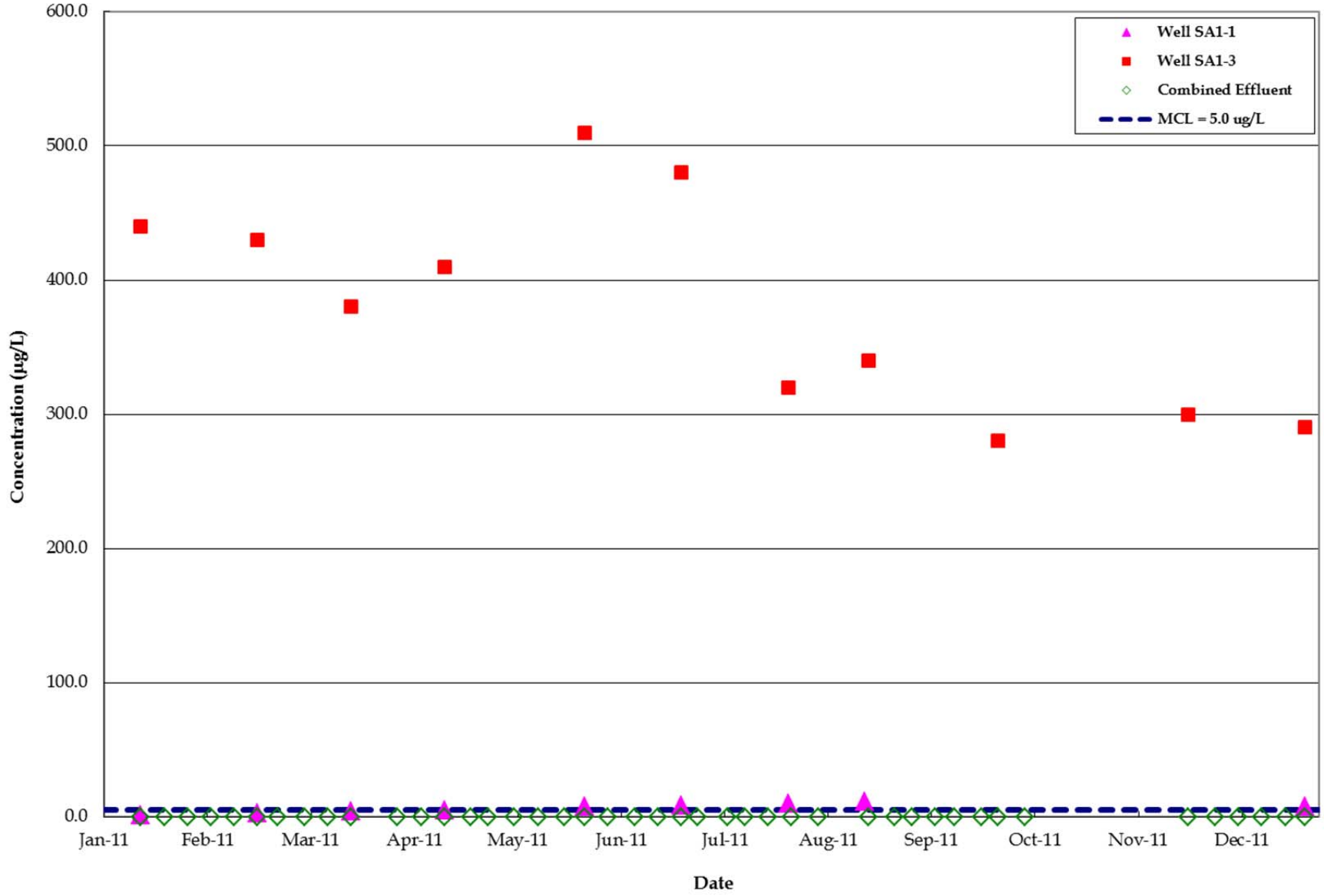


ERM

PERCHLORATE CONCENTRATIONS, RAW AND TREATED WATER FOR
VALLEY COUNTY WATER DISTRICT LANTE TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-5

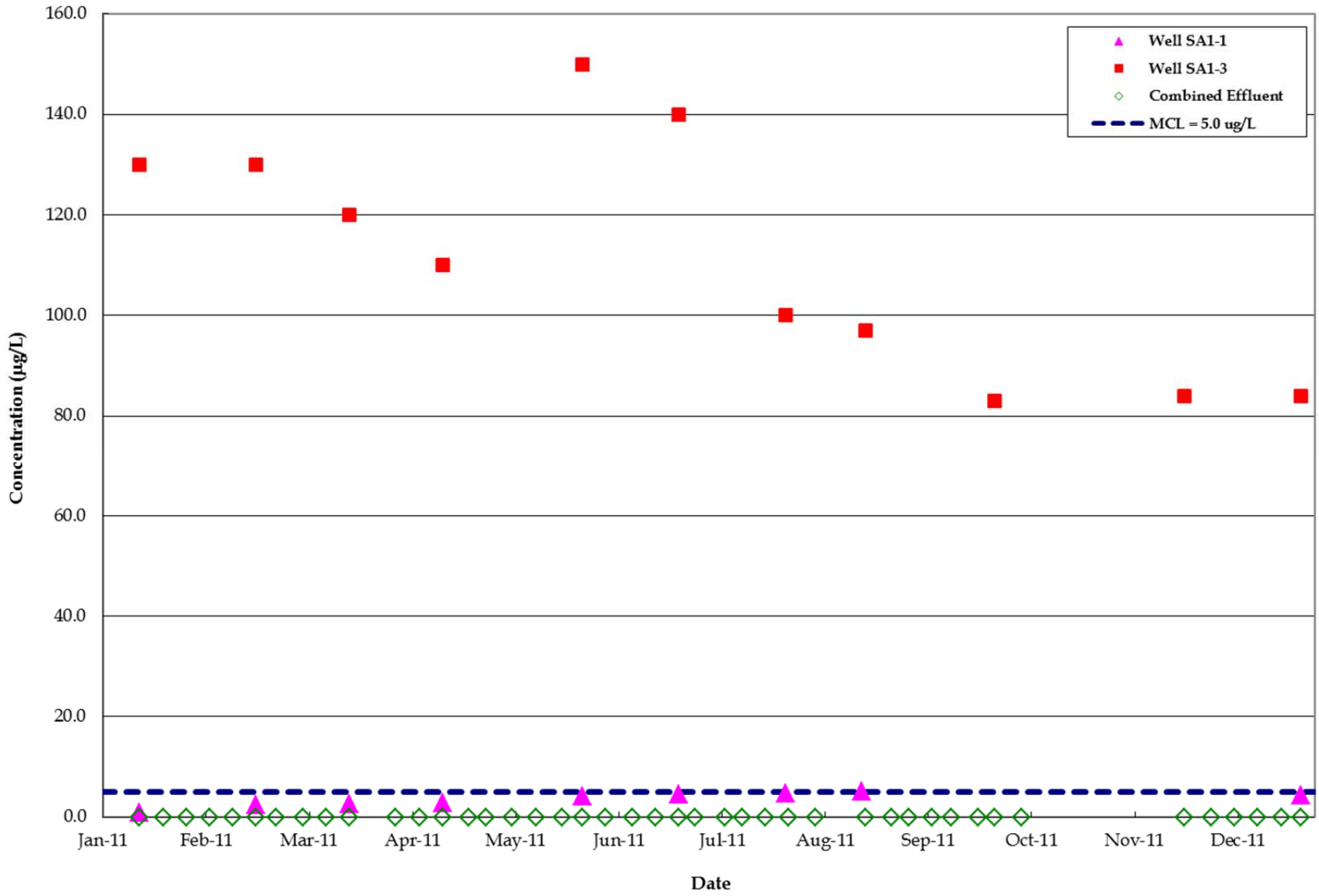


ERM

TETRACHLOROETHENE CONCENTRATIONS, RAW AND TREATED WATER FOR
VALLEY COUNTY WATER DISTRICT LANTE TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-6

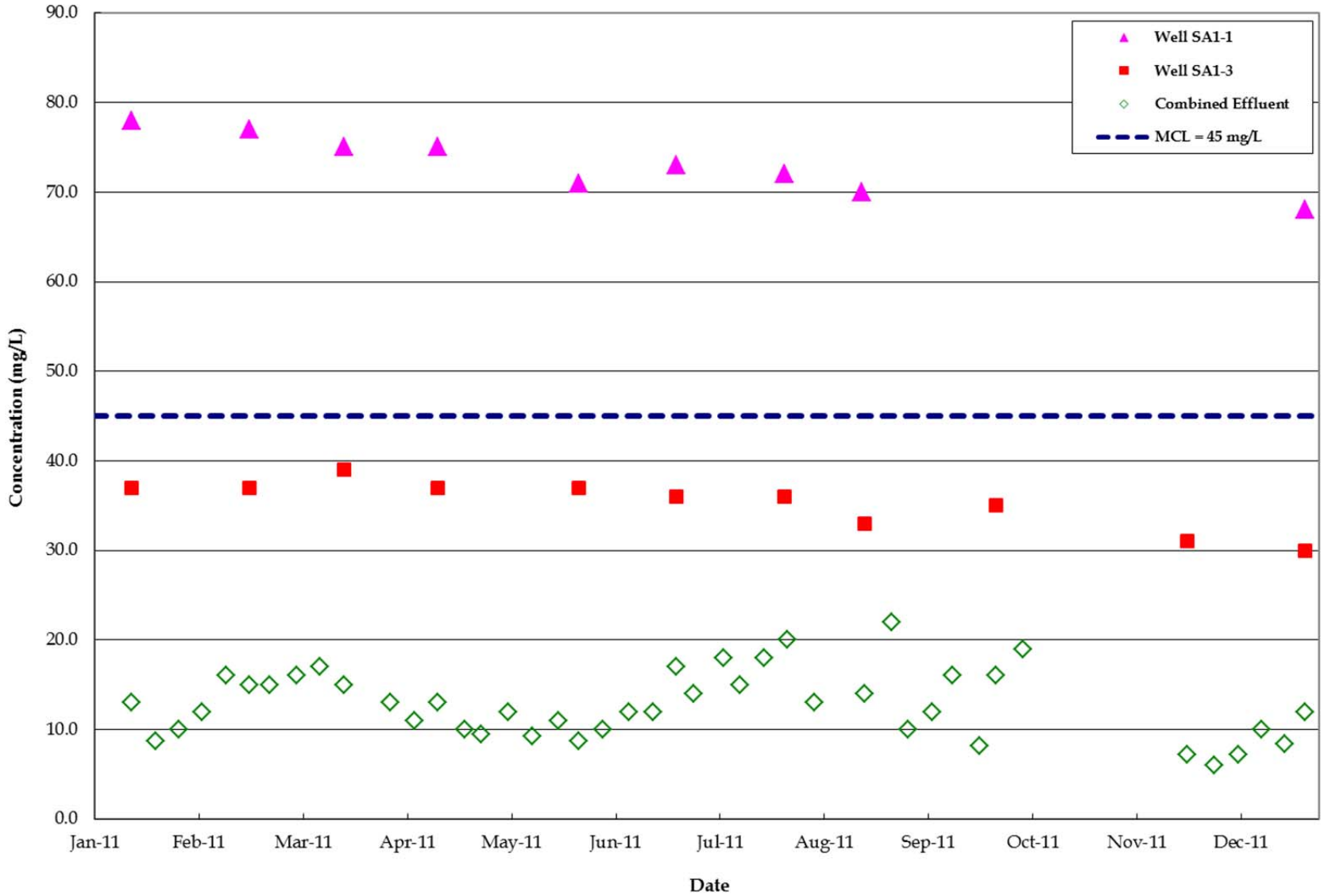


ERM

TRICHLOROETHENE CONCENTRATIONS, RAW AND TREATED WATER FOR
VALLEY COUNTY WATER DISTRICT LANTE TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-7

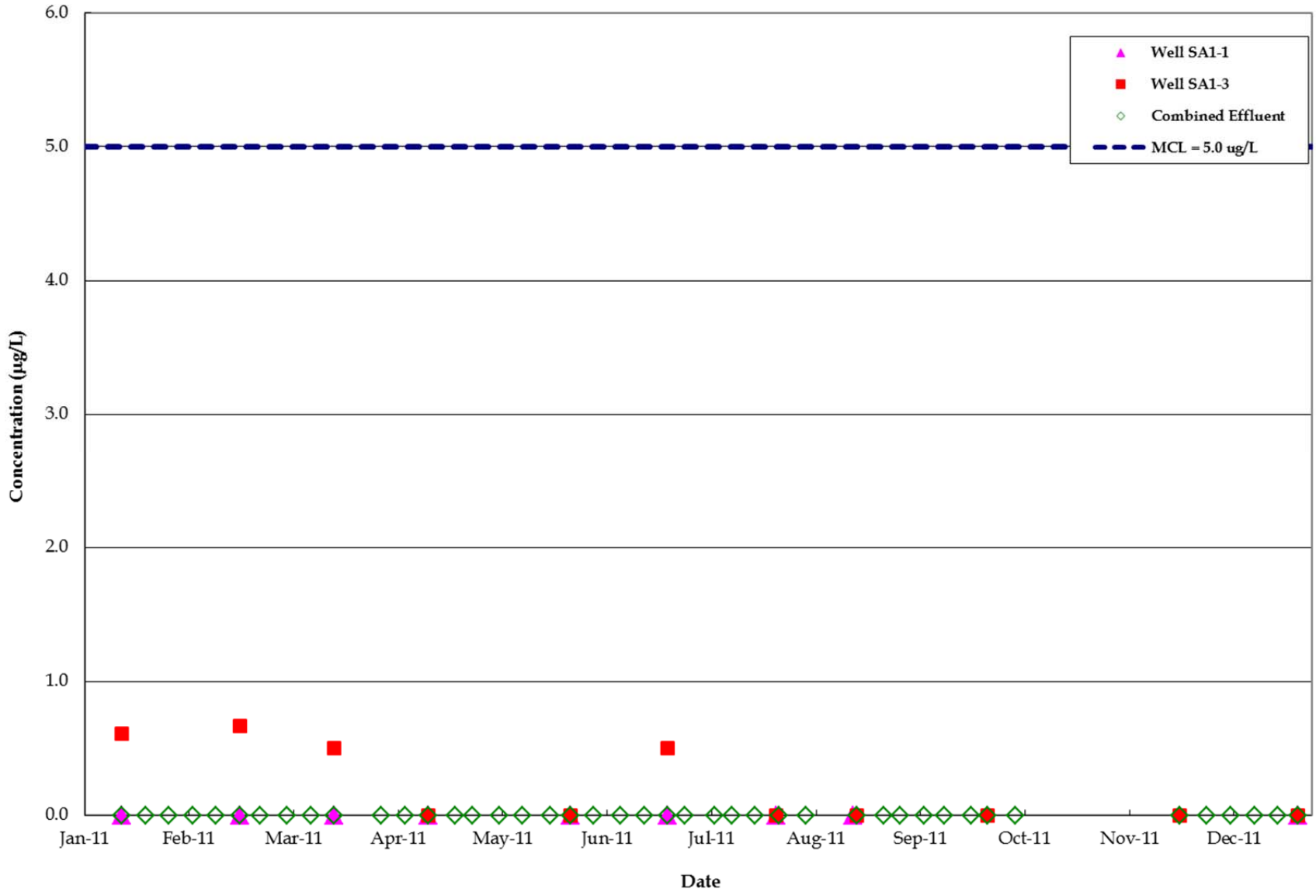


ERM

NITRATE (NO3) CONCENTRATIONS, RAW AND TREATED WATER FOR
VALLEY COUNTY WATER DISTRICT LANTE TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-8

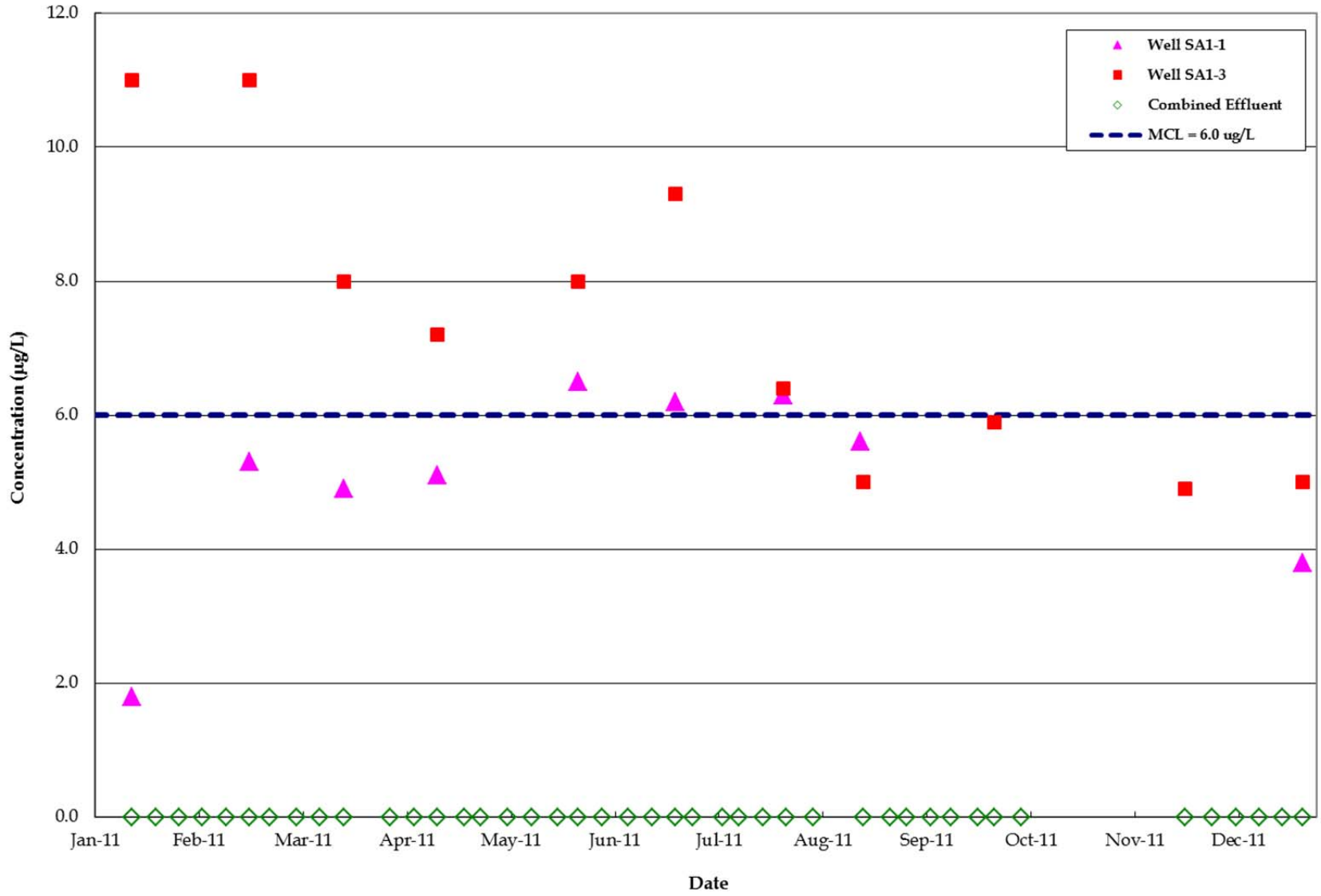


ERM

1,1-DICHLOROETHANE CONCENTRATIONS, RAW AND TREATED WATER FOR
VALLEY COUNTY WATER DISTRICT LANTE TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-9

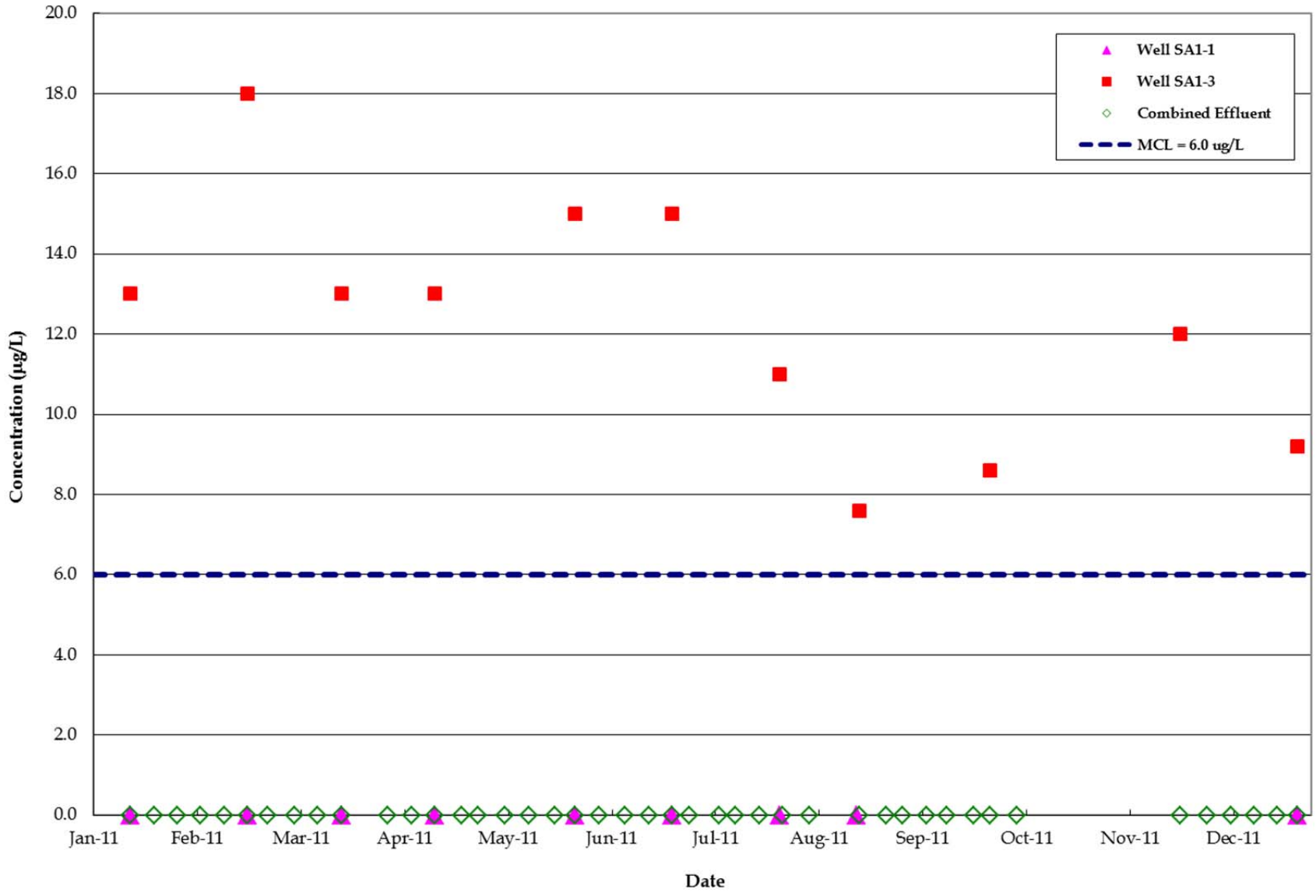


ERM

1,1-DICHLOROETHENE CONCENTRATIONS, RAW AND TREATED WATER FOR
VALLEY COUNTY WATER DISTRICT LANTE TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-10

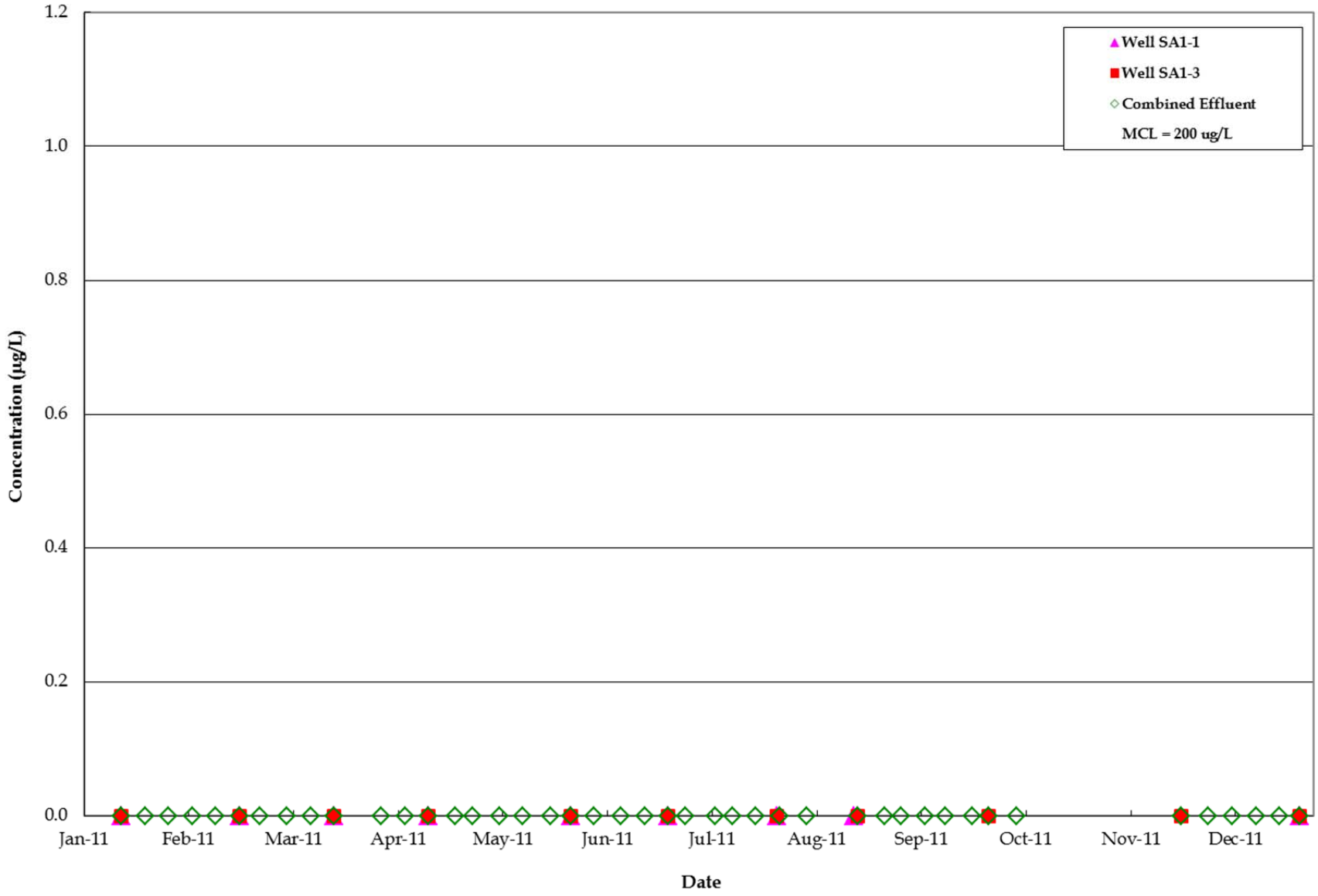


ERM

CIS-1,2-DICHLOROETHENE CONCENTRATIONS, RAW AND TREATED WATER FOR VALLEY COUNTY WATER DISTRICT LANTE TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-11

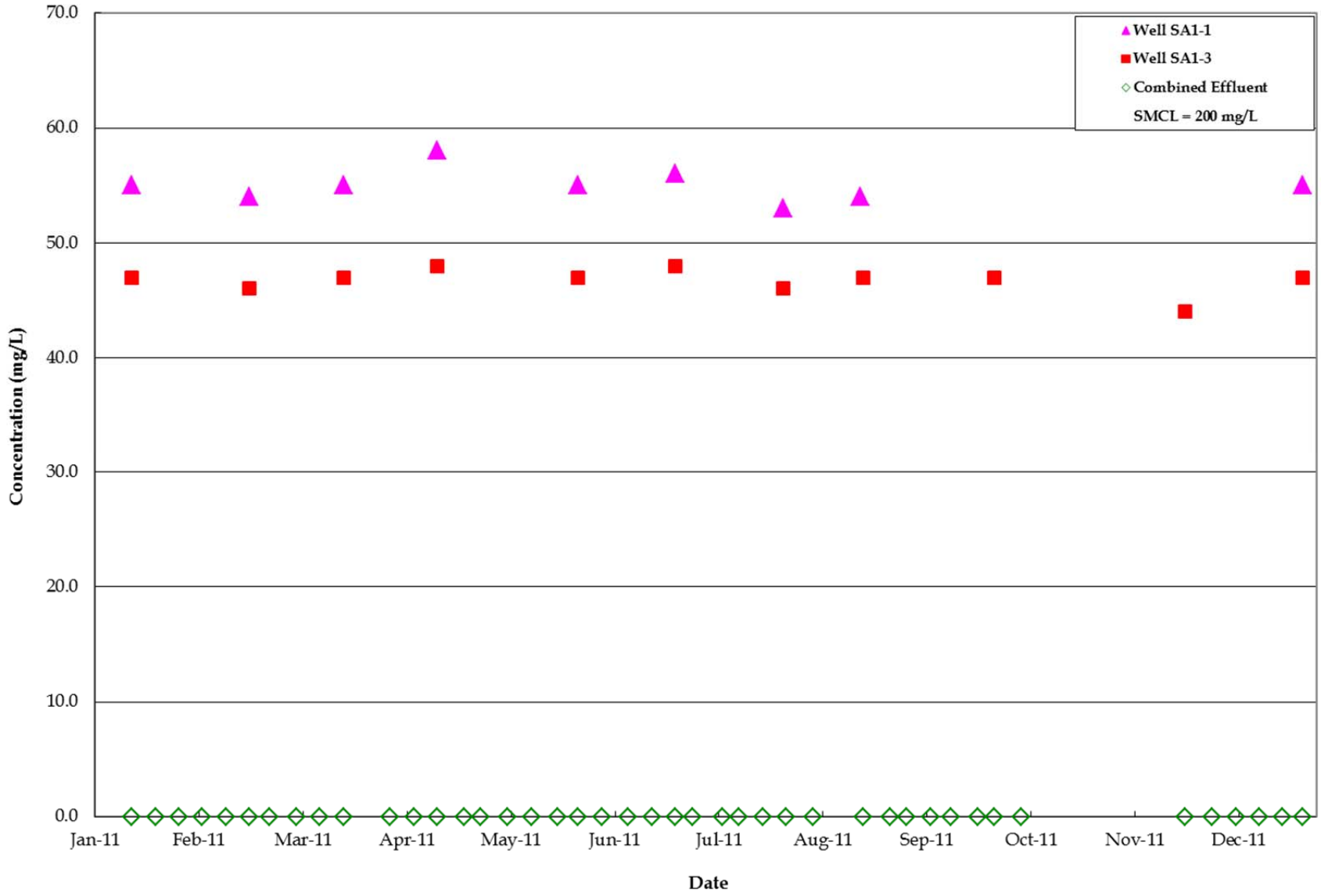


ERM

1,1,1-TRICHLOROETHANE CONCENTRATIONS, RAW AND TREATED WATER FOR
VALLEY COUNTY WATER DISTRICT LANTE TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-12

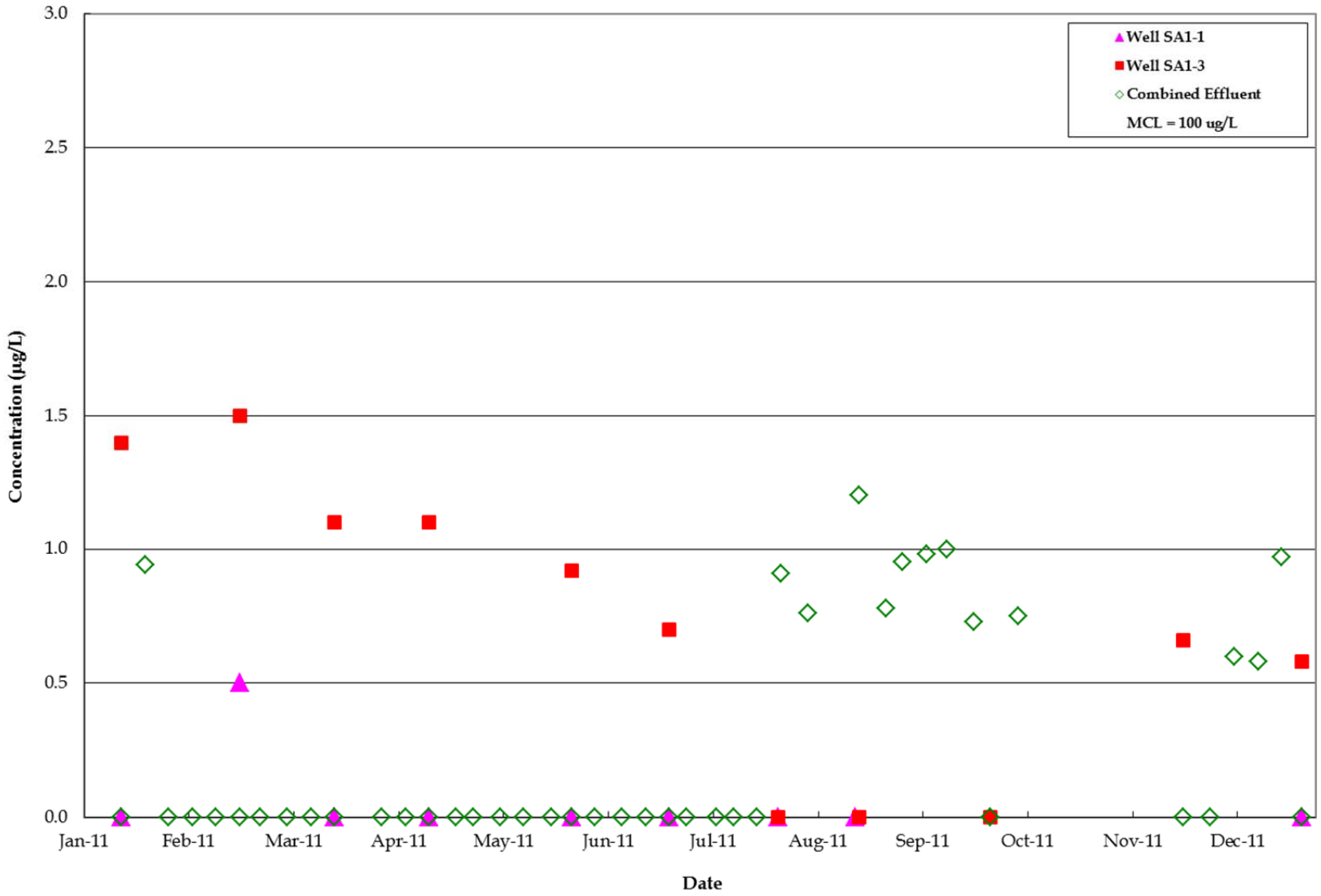


ERM

SULFATE CONCENTRATIONS, RAW AND TREATED WATER FOR
VALLEY COUNTY WATER DISTRICT LANTE TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-13

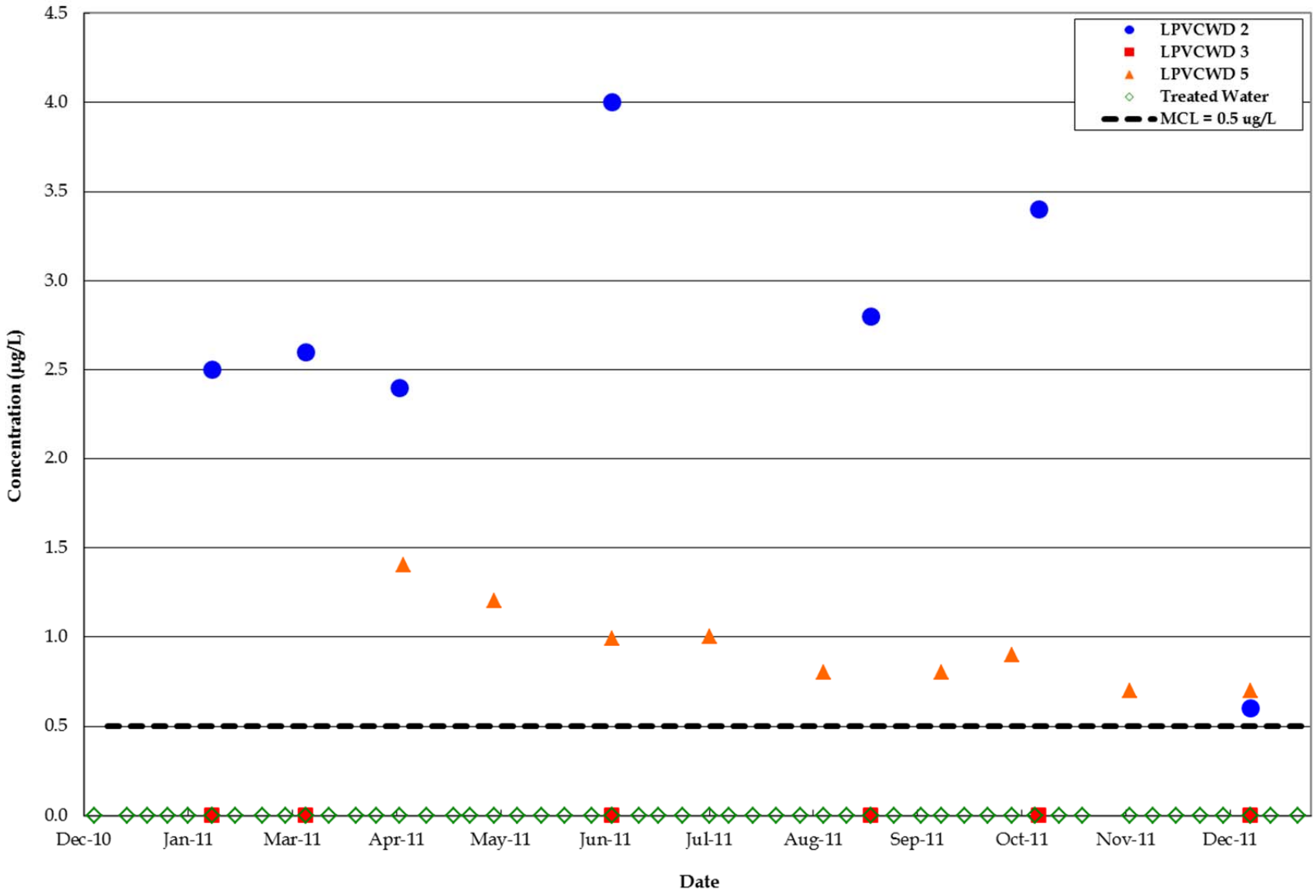


ERM

CHLOROFORM CONCENTRATIONS, RAW AND TREATED WATER FOR
VALLEY COUNTY WATER DISTRICT LANTE TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-14

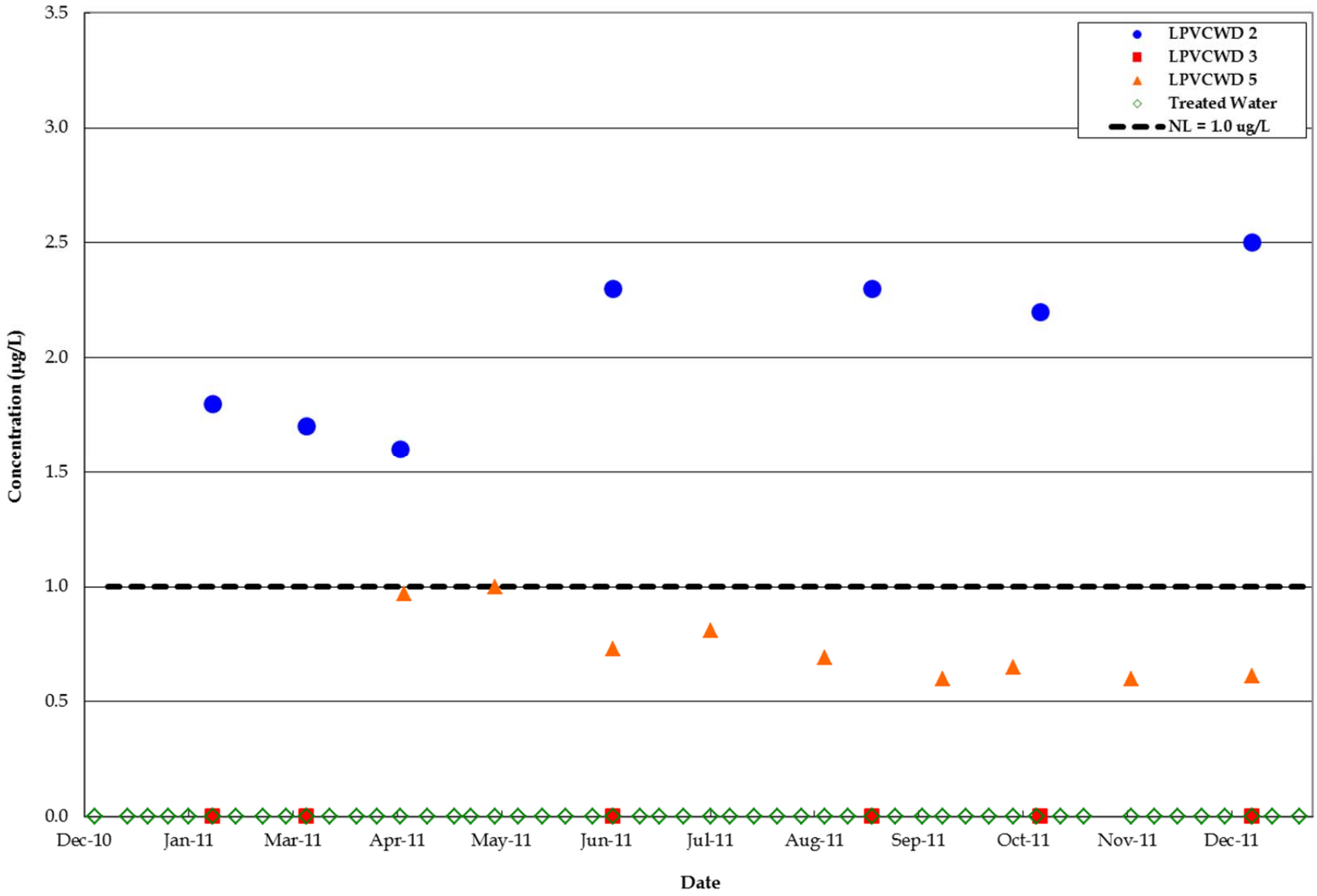


ERM

1,2-DICHLOROETHANE CONCENTRATIONS, RAW AND TREATED WATER FOR
LA PUENTE VALLEY COUNTY WATER DISTRICT TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-15

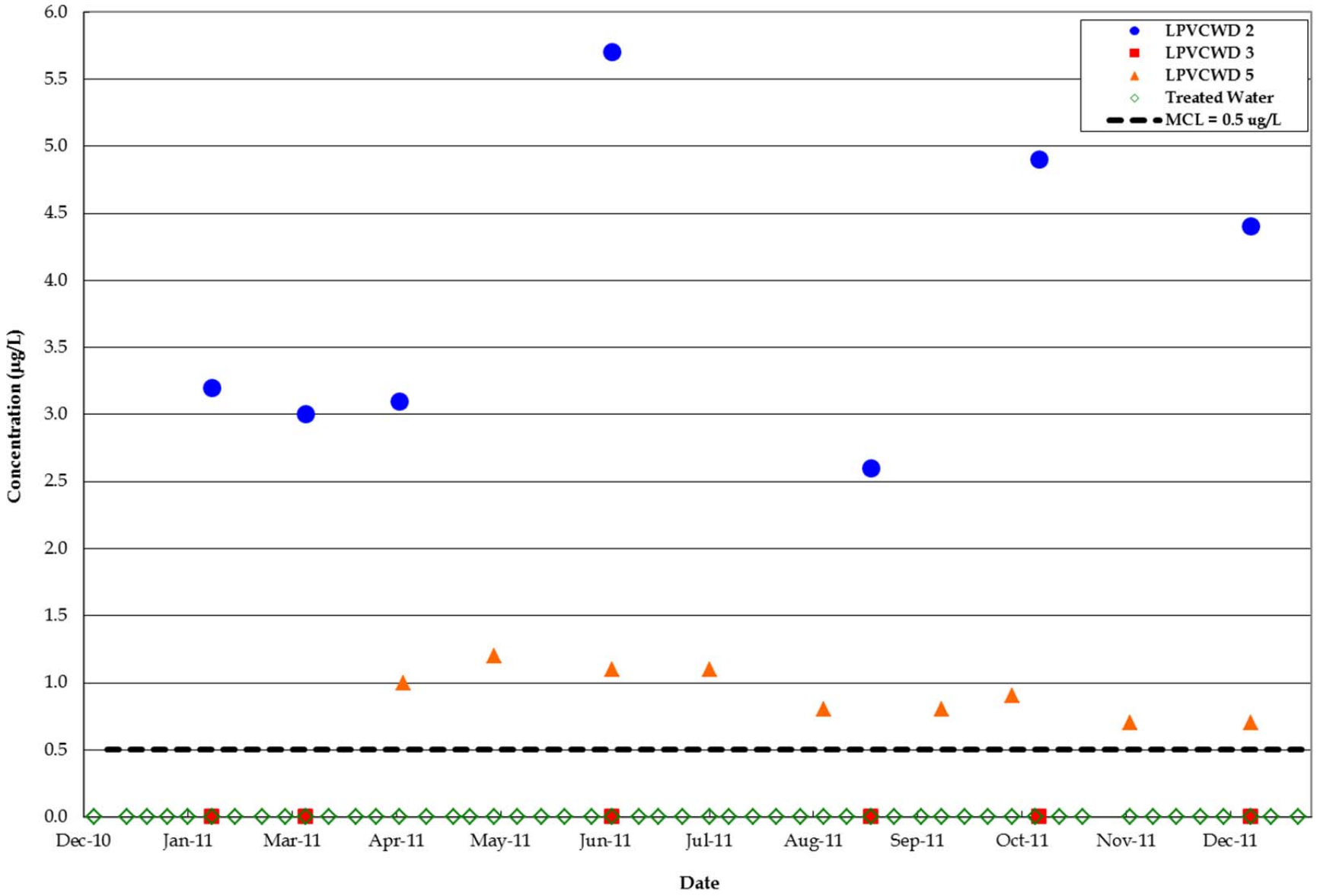


ERM

1,4-DIOXANE CONCENTRATIONS, RAW AND TREATED WATER FOR
LA PUENTE VALLEY COUNTY WATER DISTRICT TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-16

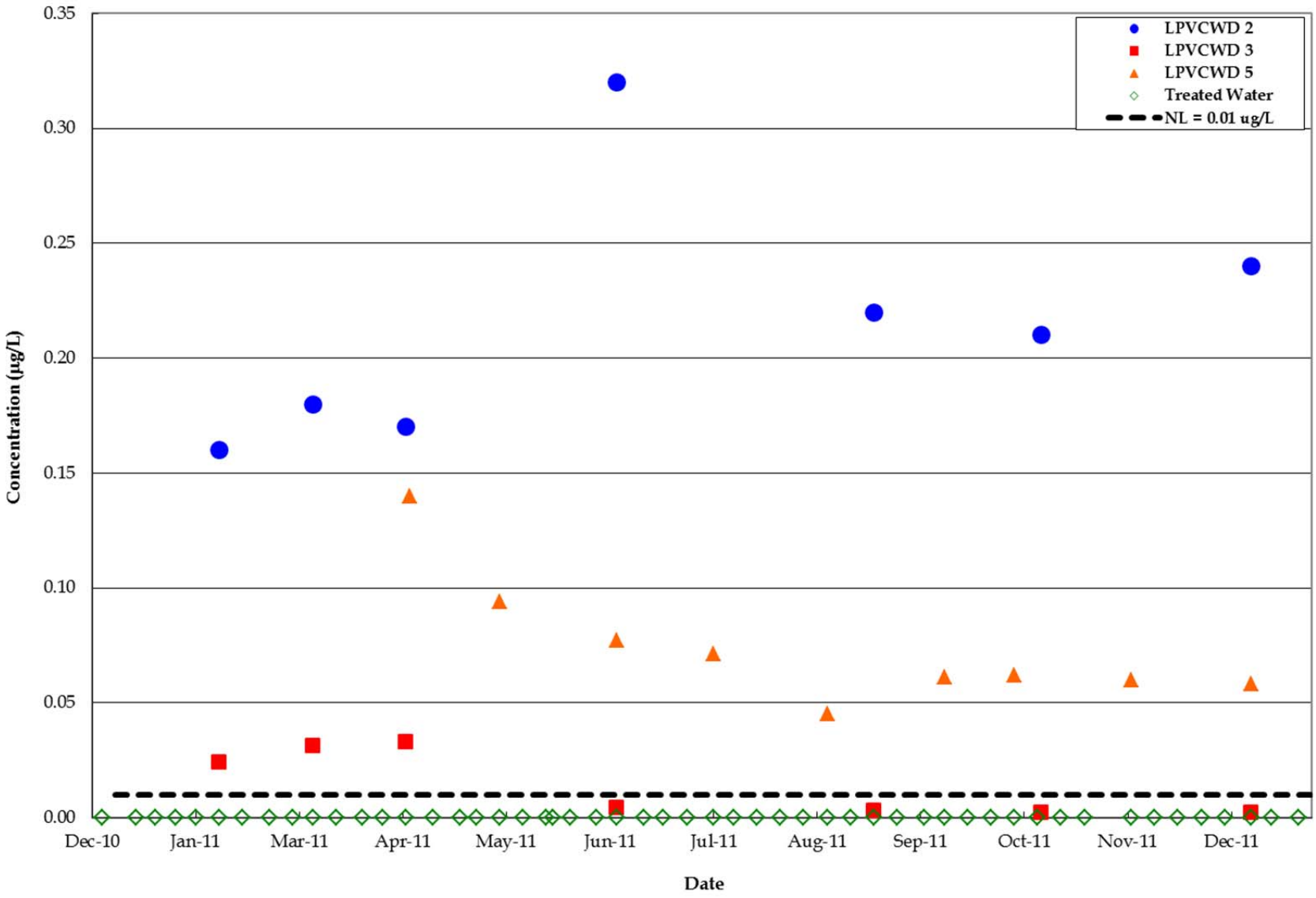


ERM

CARBON TETRACHLORIDE CONCENTRATIONS, RAW AND TREATED WATER FOR
LA PUENTE VALLEY COUNTY WATER DISTRICT TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-17

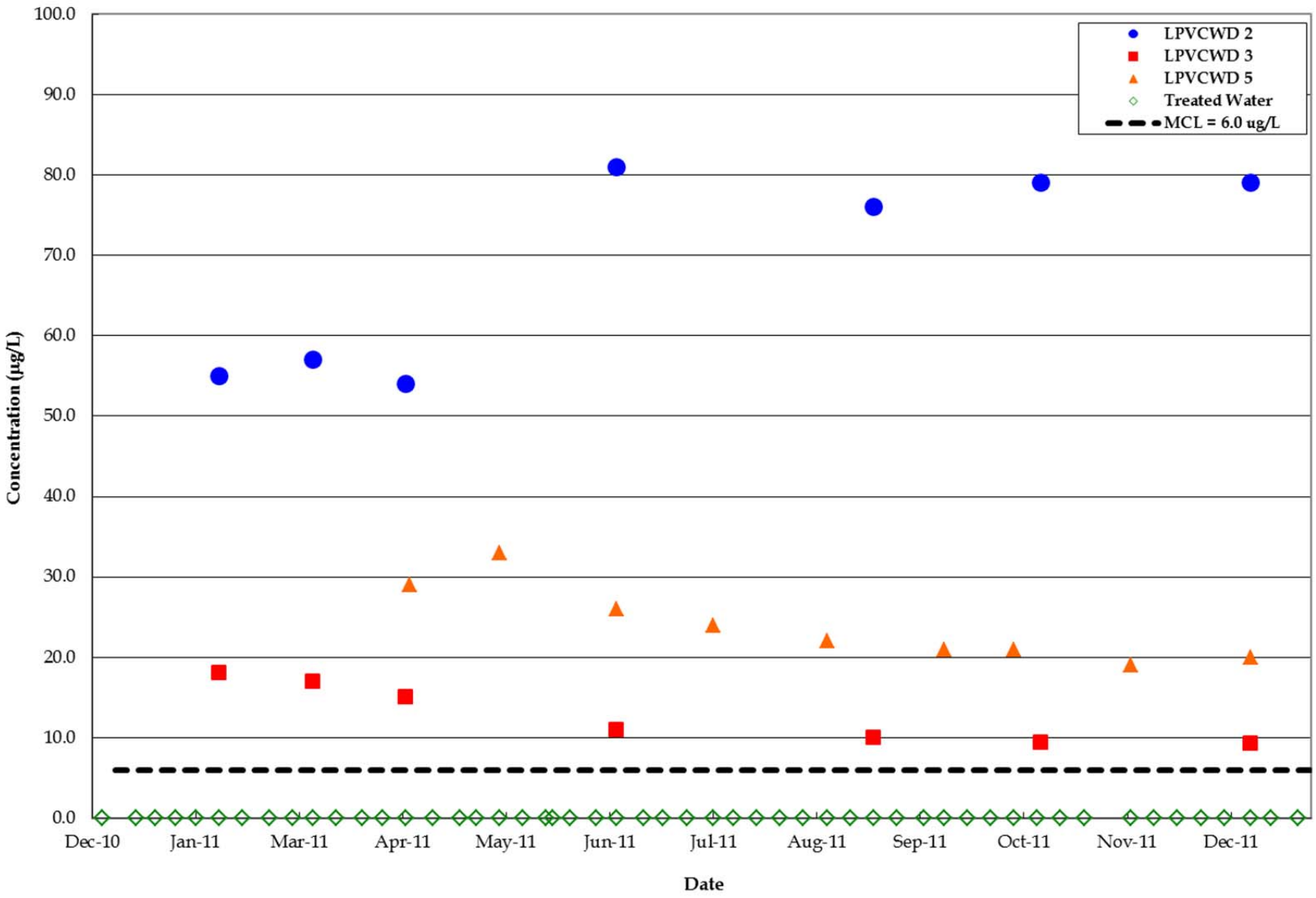


ERM

N-NITROSODIMETHYLAMINE CONCENTRATIONS, RAW AND TREATED WATER FOR
LA PUENTE VALLEY COUNTY WATER DISTRICT TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-18

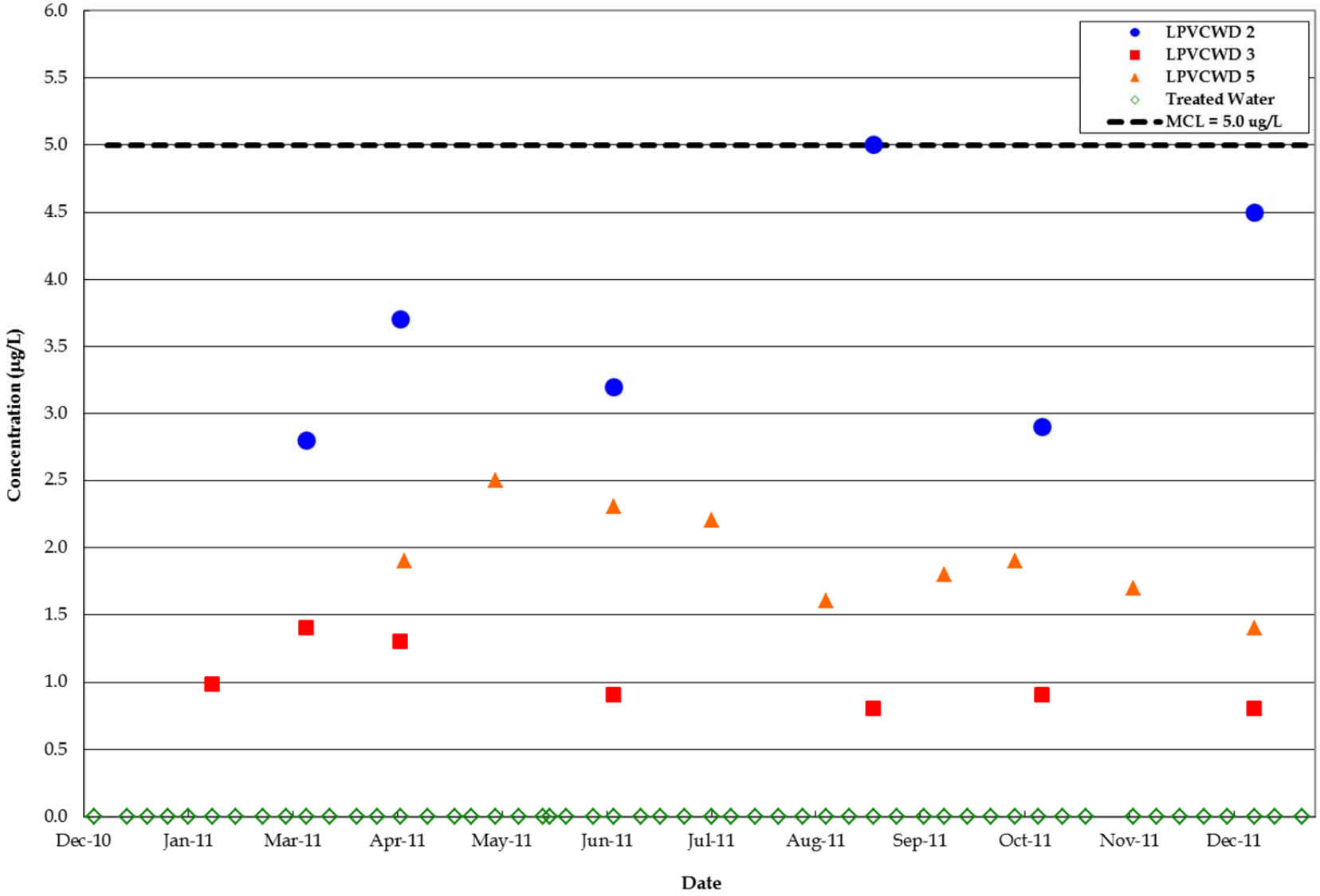


ERM

PERCHLORATE CONCENTRATIONS, RAW AND TREATED WATER FOR
LA PUENTE VALLEY COUNTY WATER DISTRICT TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-19

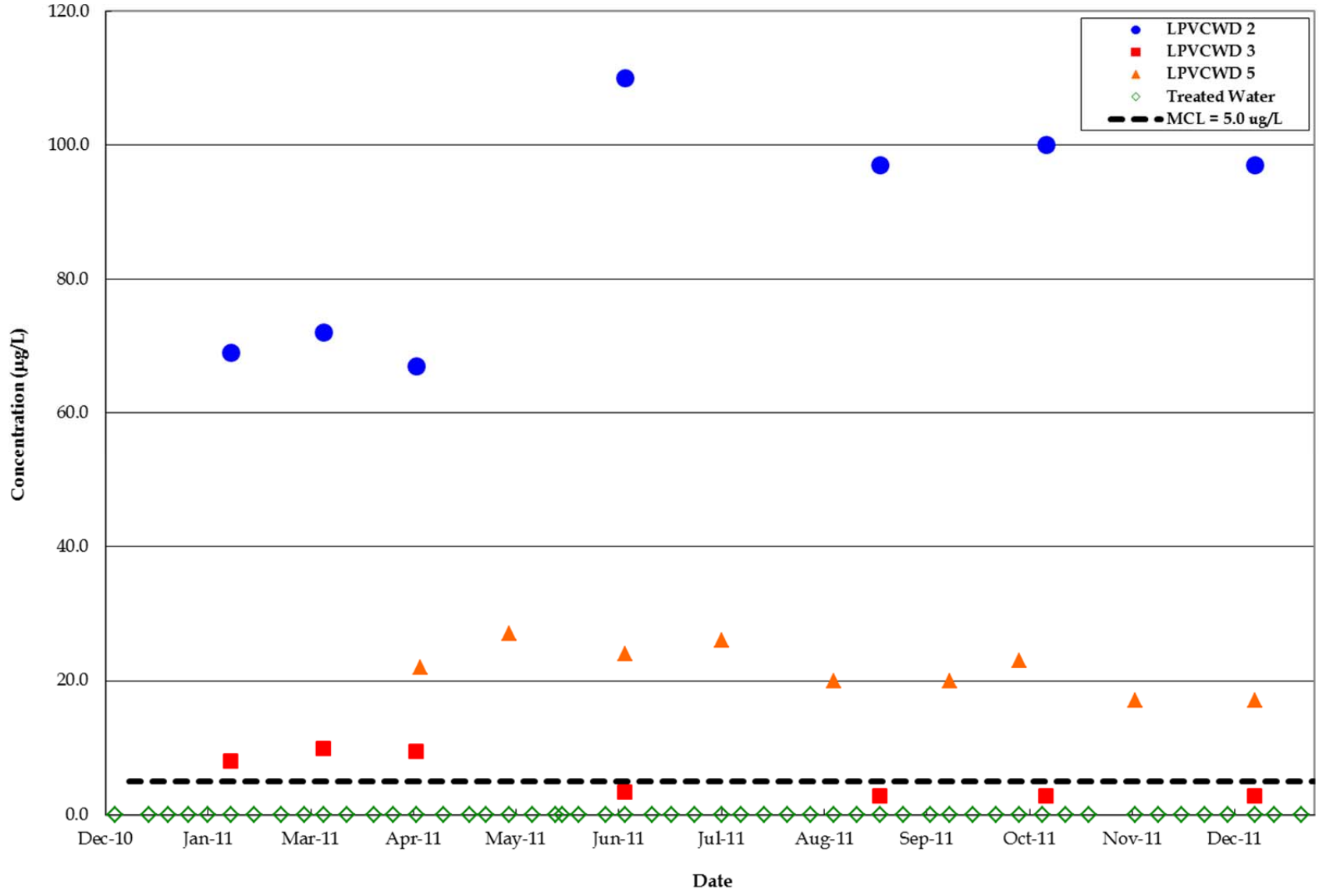


ERM

TETRACHLOROETHENE CONCENTRATIONS, RAW AND TREATED WATER FOR
LA PUENTE VALLEY COUNTY WATER DISTRICT TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-20

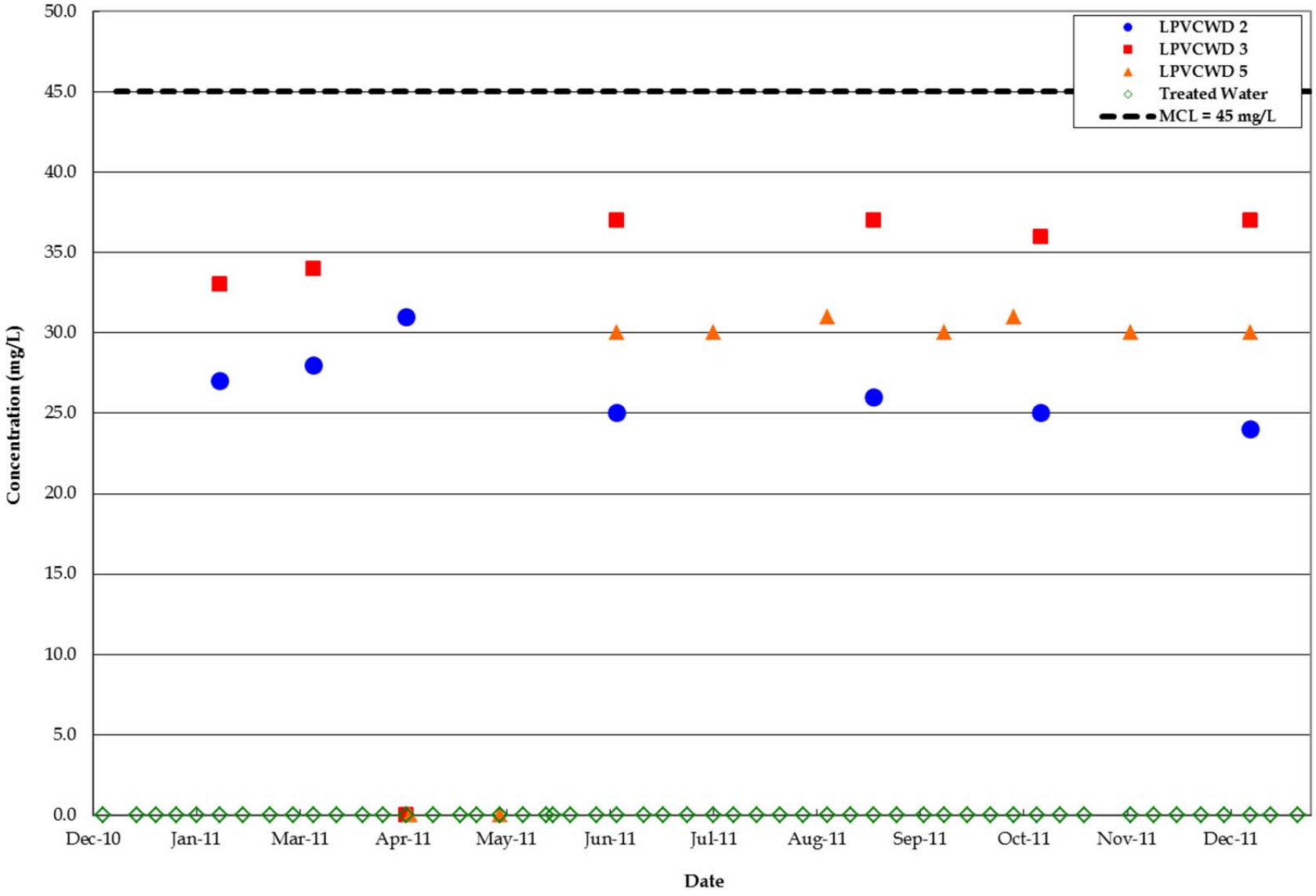


ERM

TRICHLOROETHENE CONCENTRATIONS, RAW AND TREATED WATER FOR
LA PUENTE VALLEY COUNTY WATER DISTRICT TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-21

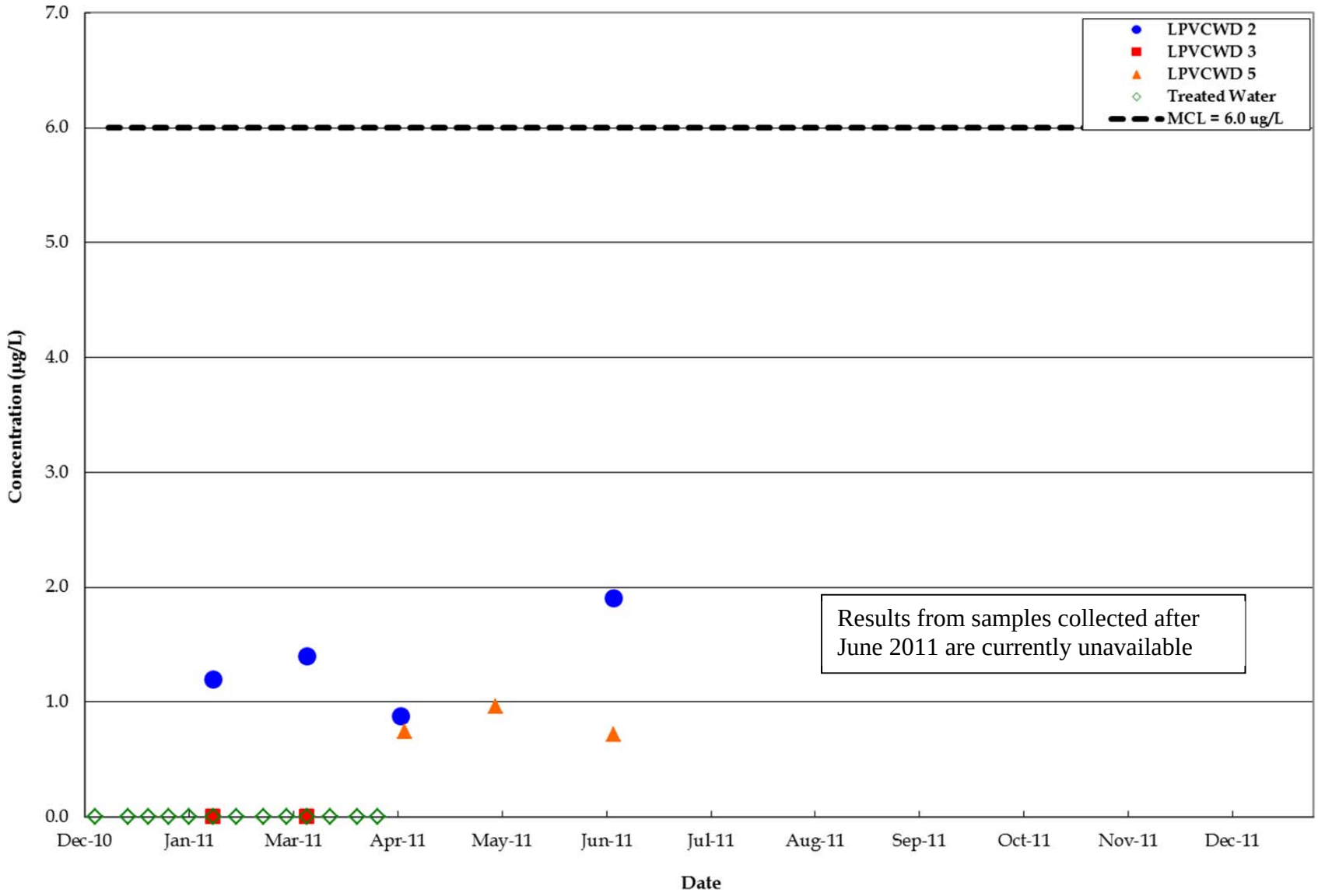


ERM

NITRATE CONCENTRATIONS, RAW AND TREATED WATER FOR
LA PUENTE VALLEY COUNTY WATER DISTRICT TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-22

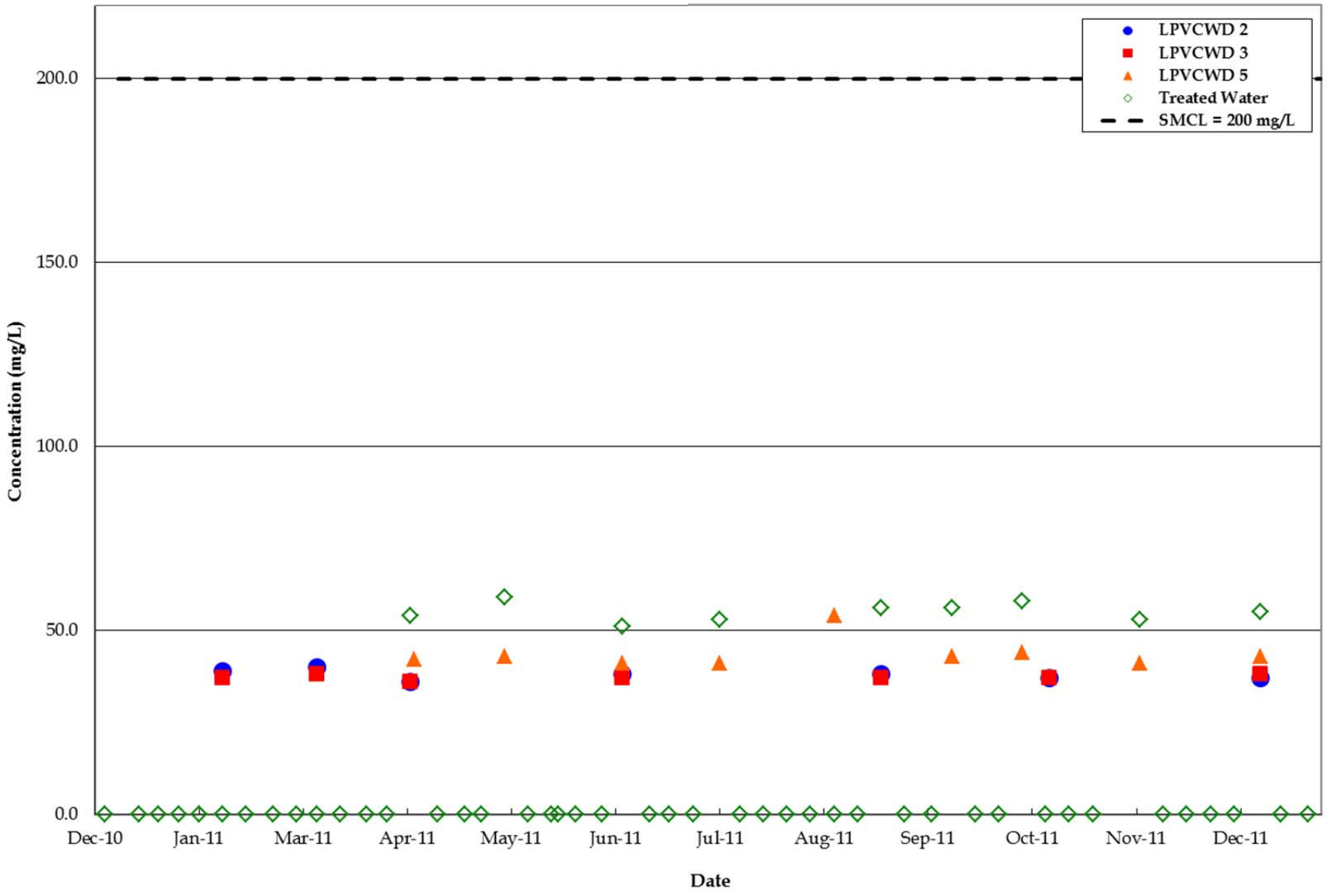


ERM

CIS-1,2-DICHLOROETHENE CONCENTRATIONS, RAW AND TREATED WATER FOR
LA PUENTE VALLEY COUNTY WATER DISTRICT TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-23

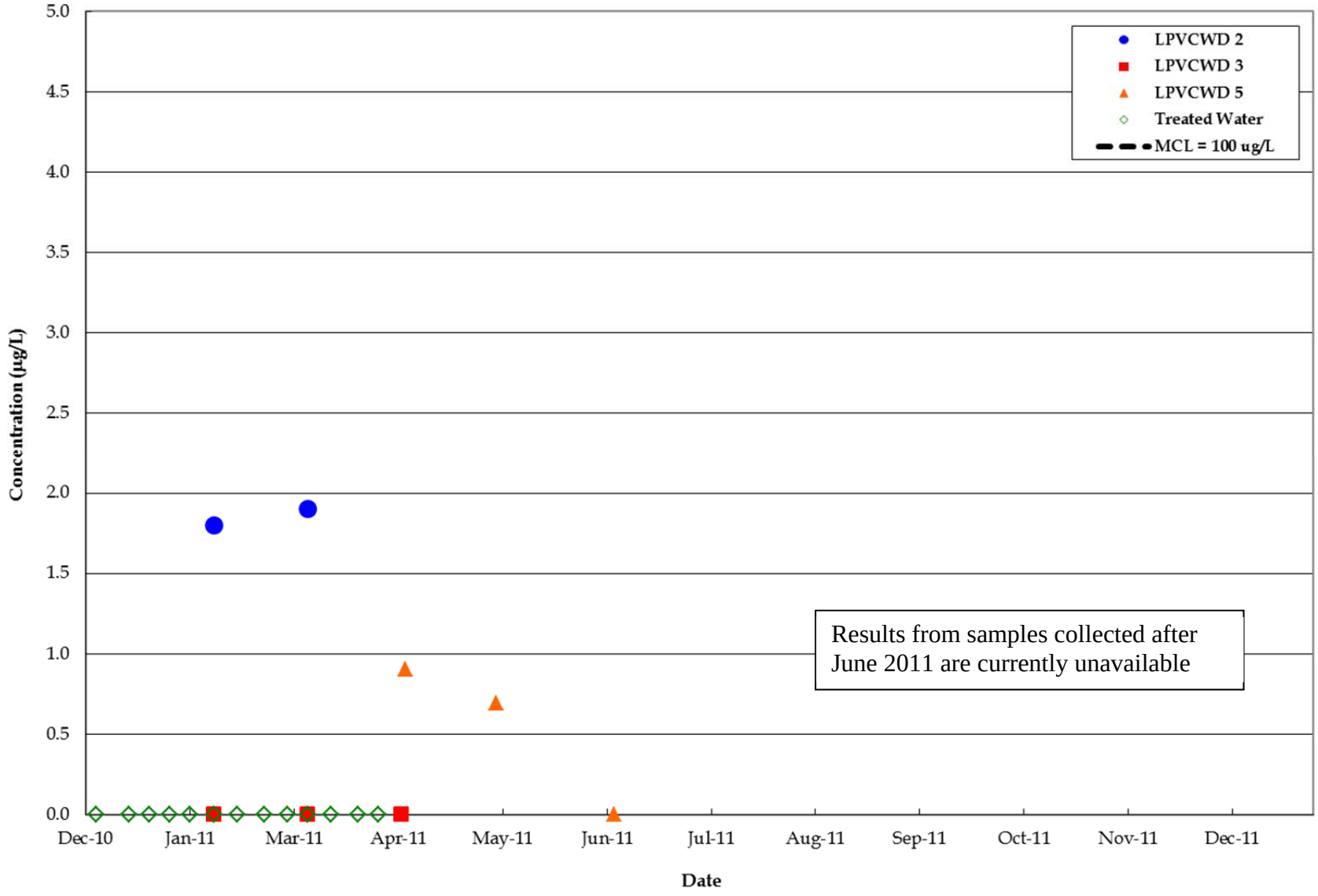


ERM

SULFATE CONCENTRATIONS, RAW AND TREATED WATER FOR
LA PUENTE VALLEY COUNTY WATER DISTRICT TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-24

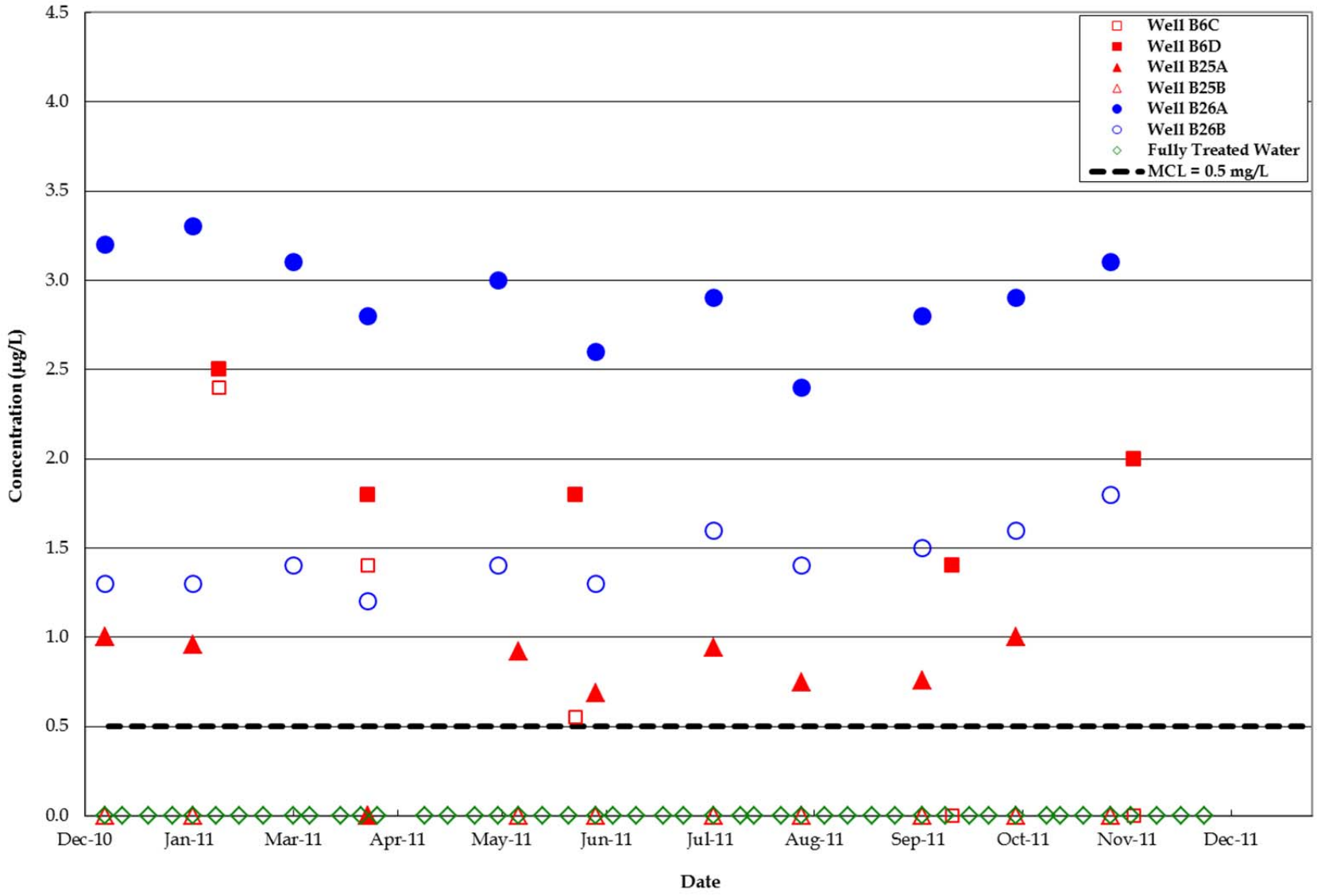


ERM

CHLOROFORM CONCENTRATIONS, RAW AND TREATED WATER FOR
LA PUENTE VALLEY COUNTY WATER DISTRICT TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-25

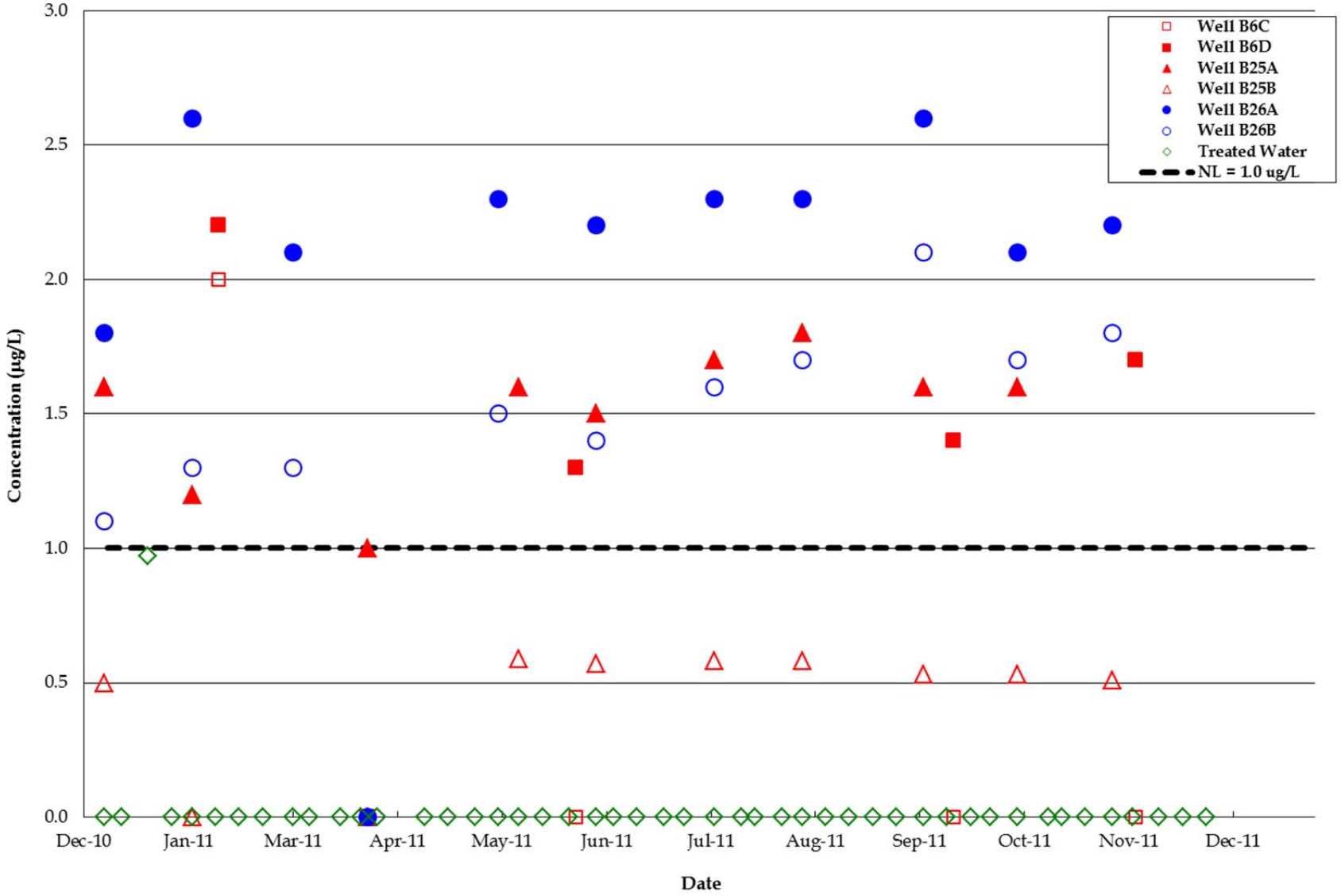


ERM

1,2-DICHLOROETHANE CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B6 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-26

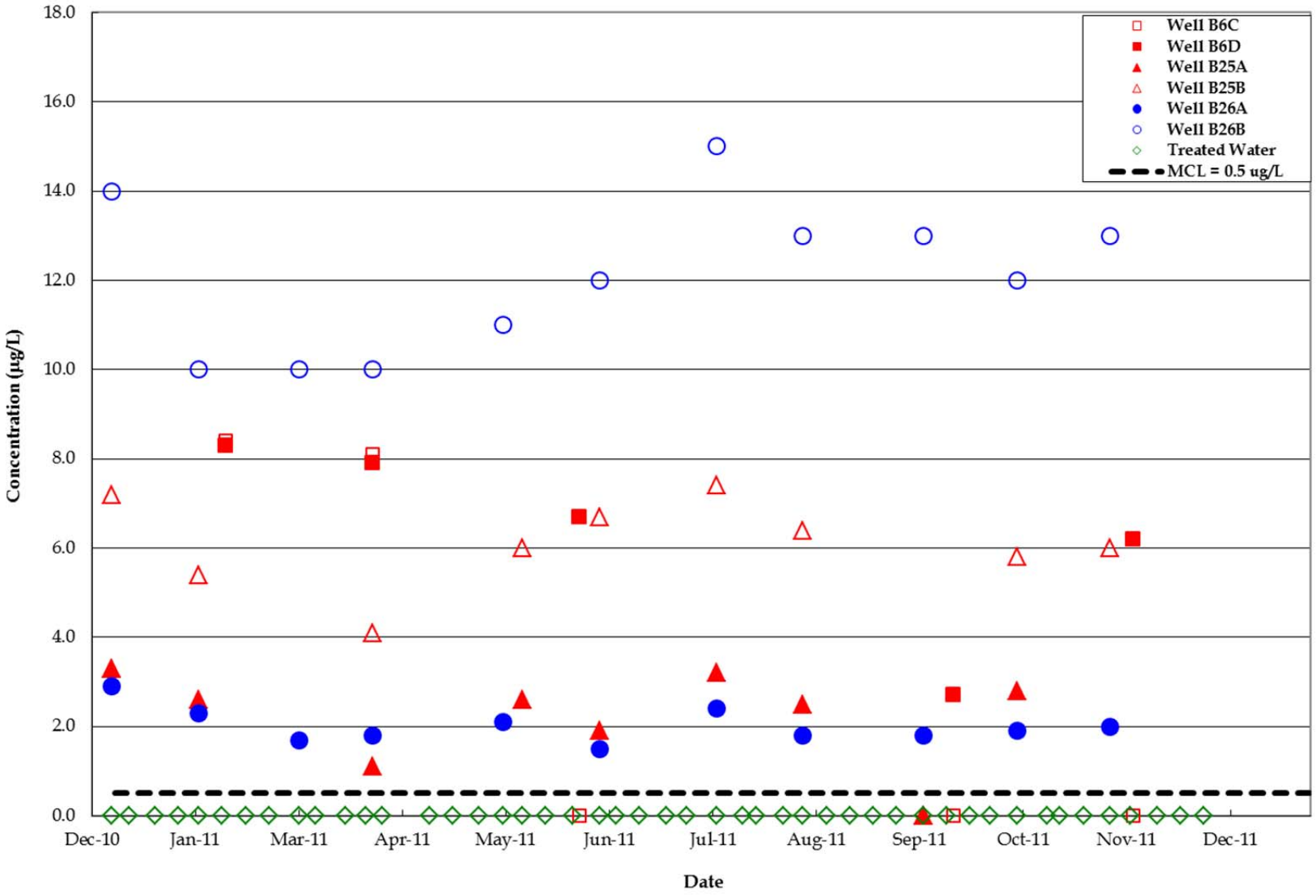


ERM

1,4-DIOXANE CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B6 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-27

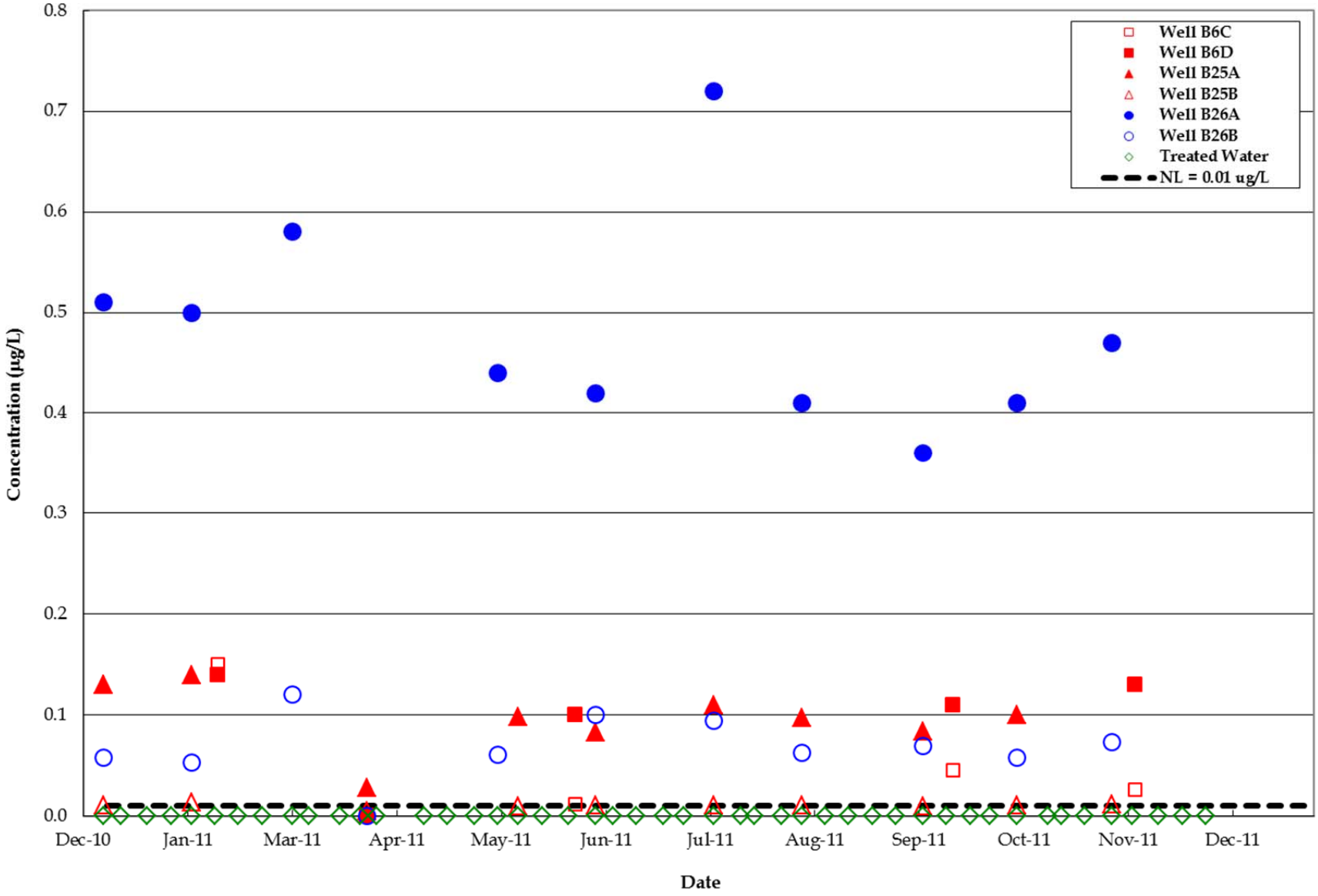


ERM

CARBON TETRACHLORIDE CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B6 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-28

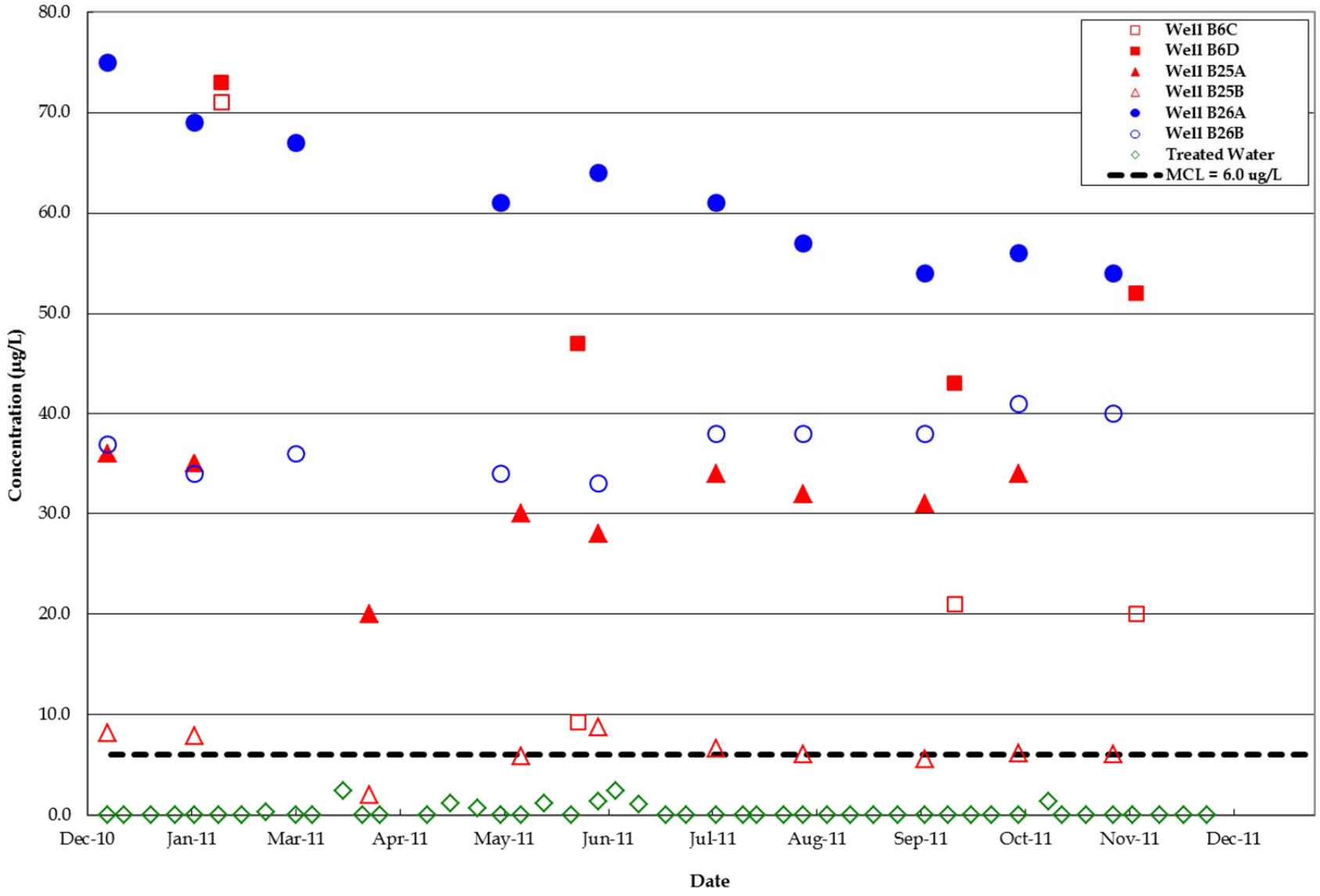


ERM

N-NITROSODIMETHYLAMINE CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B6 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-29

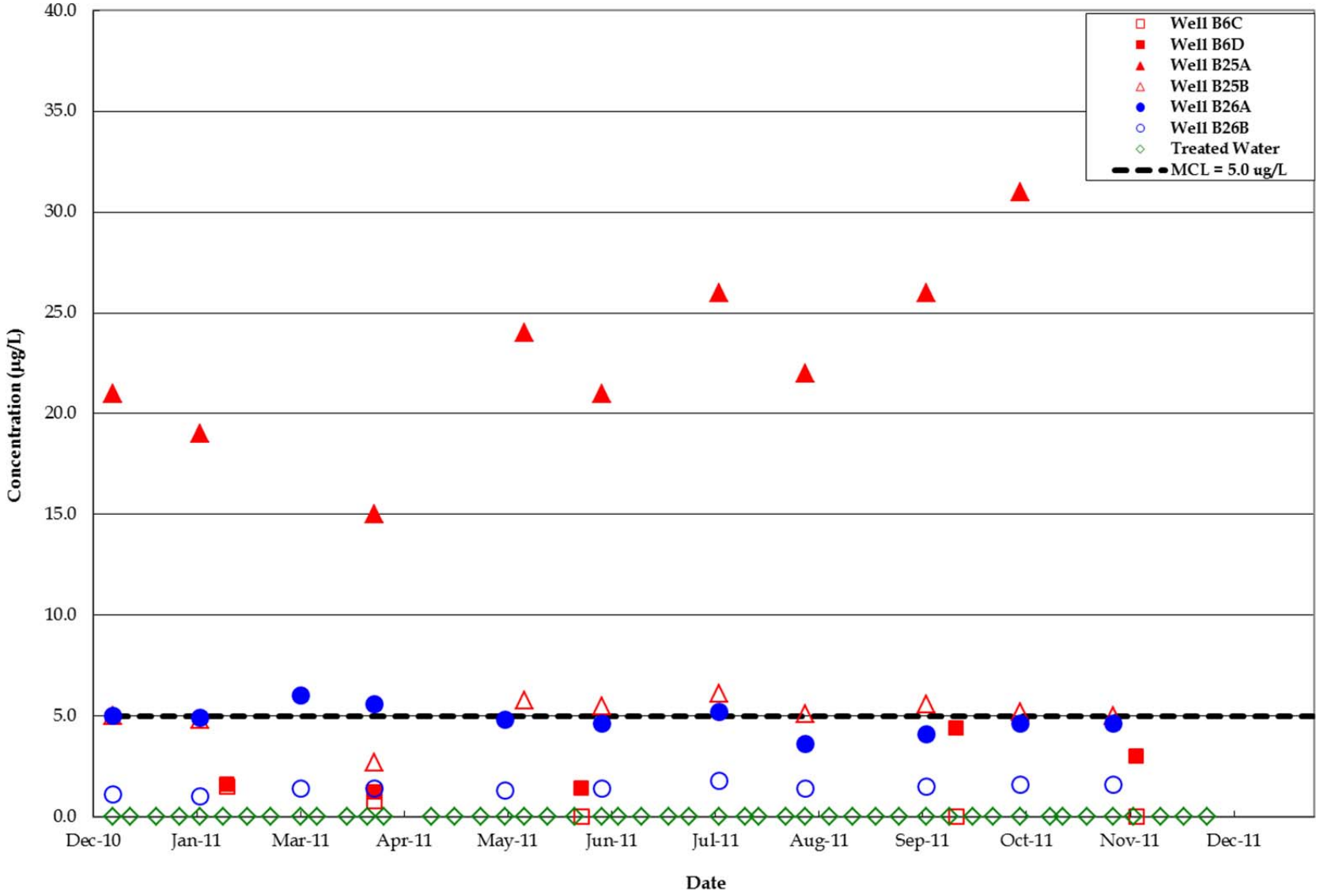


ERM

PERCHLORATE CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B6 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-30

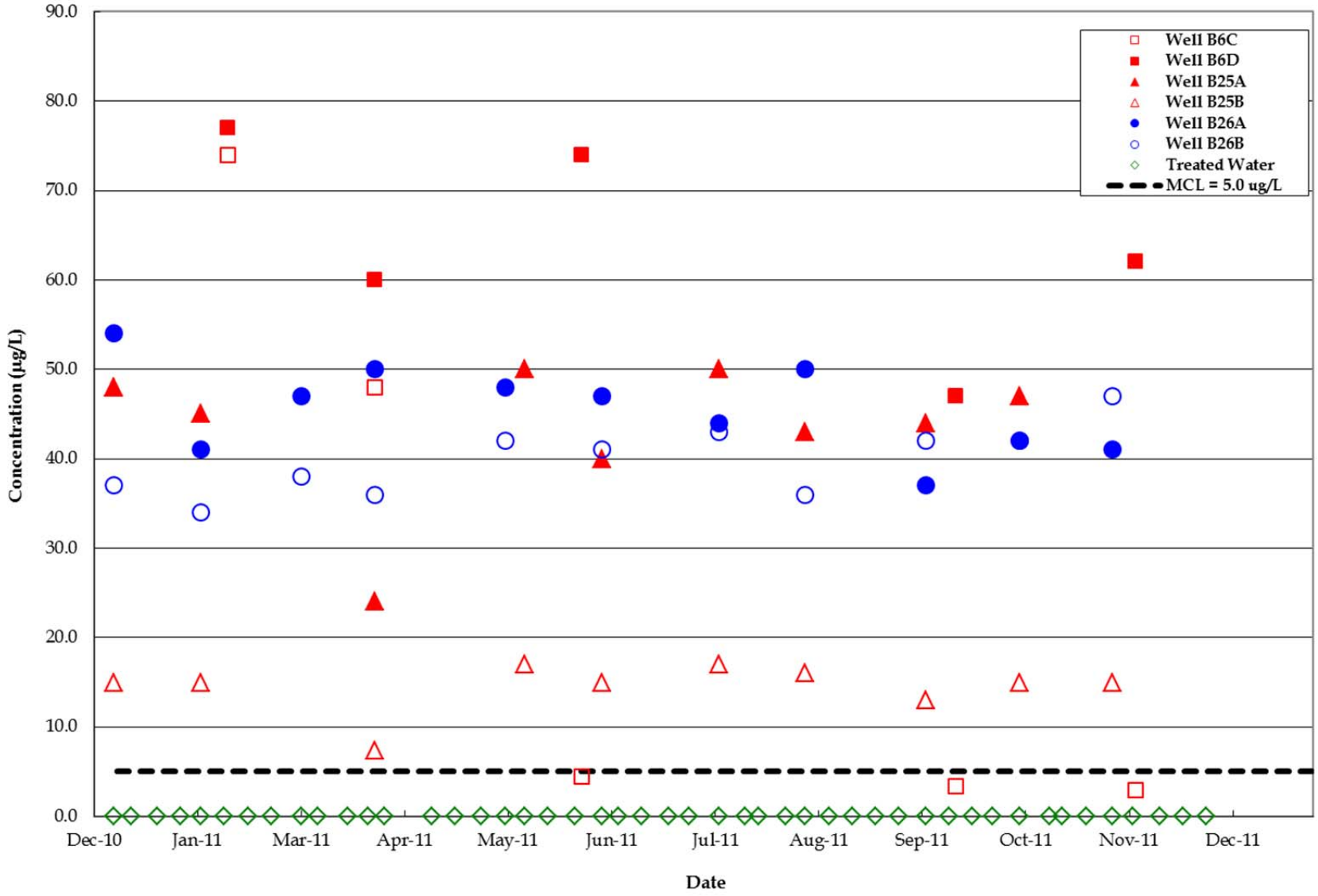


ERM

TETRACHLOROETHENE CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B6 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-31

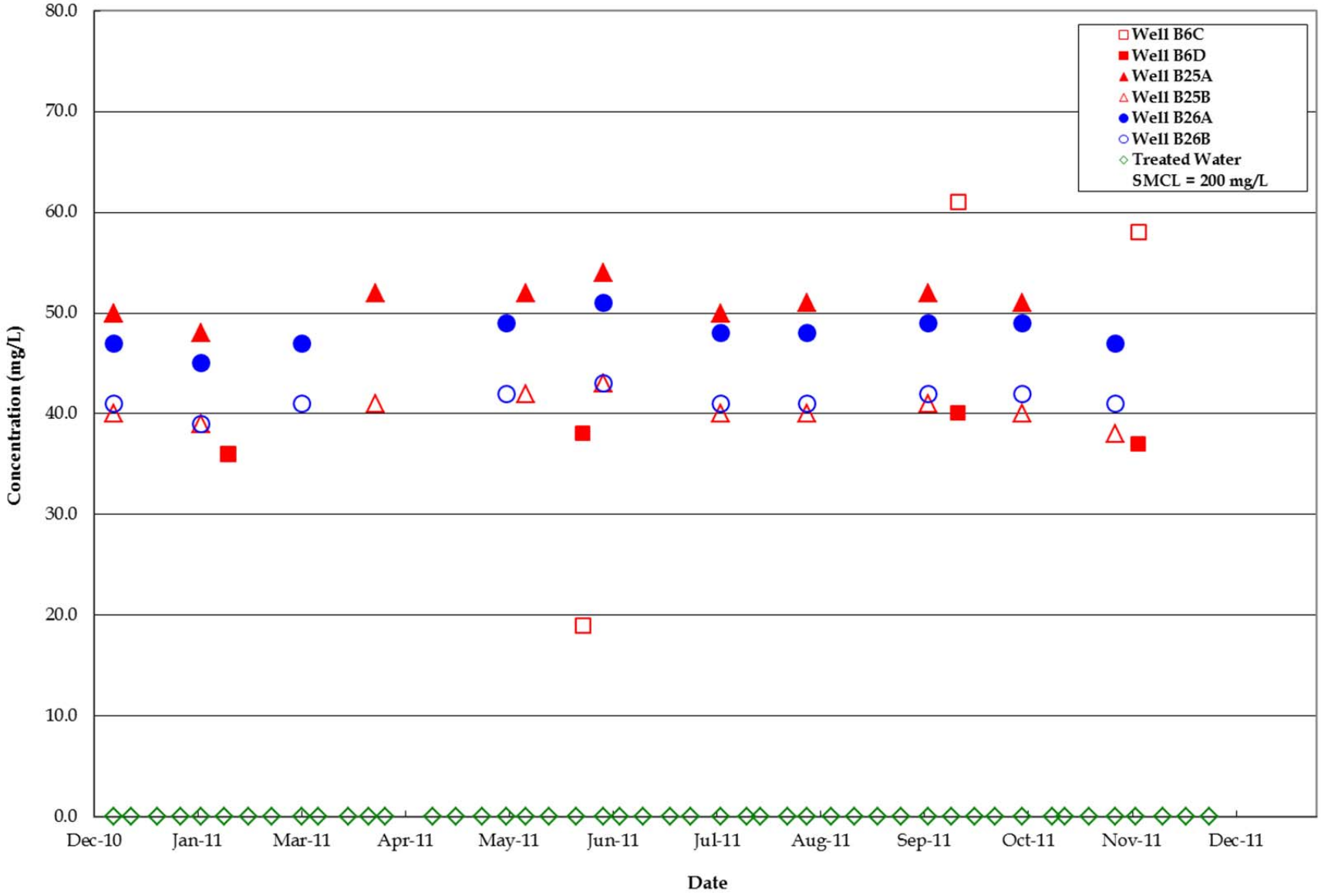


ERM

TRICHLOROETHENE CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B6 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-32

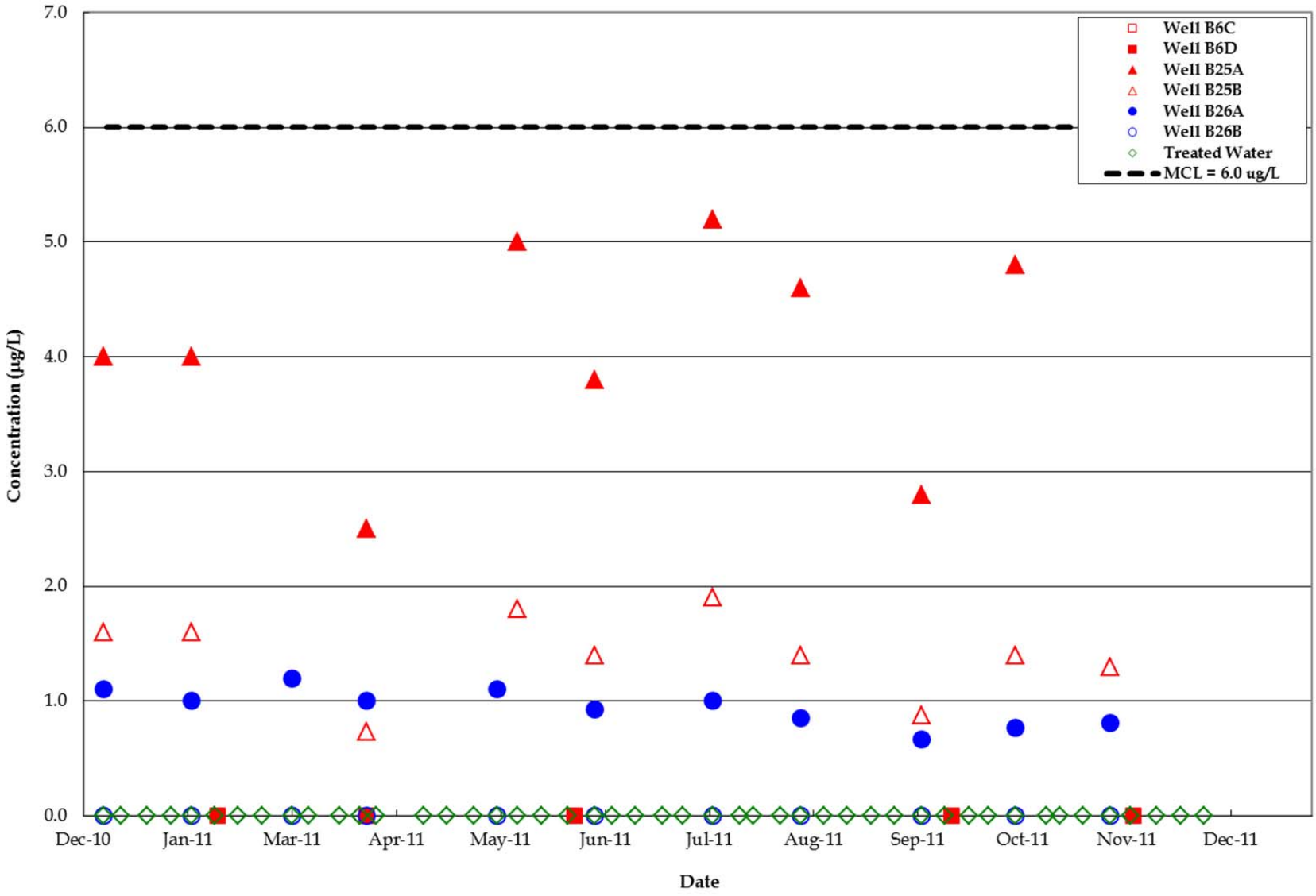


ERM

NITRATE (NO3) CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B6 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-33

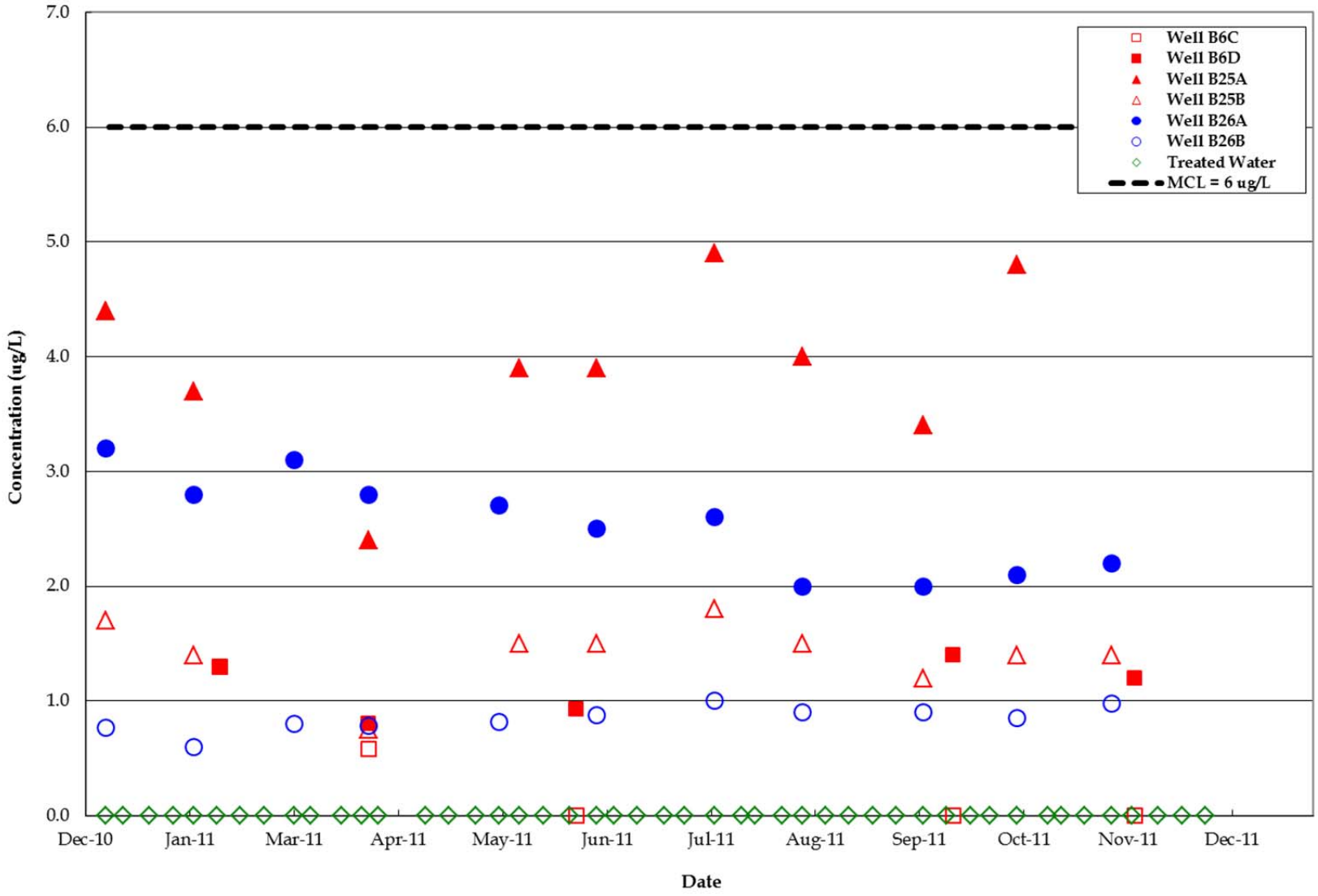


ERM

1,1-DICHLOROETHENE CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B6 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-34

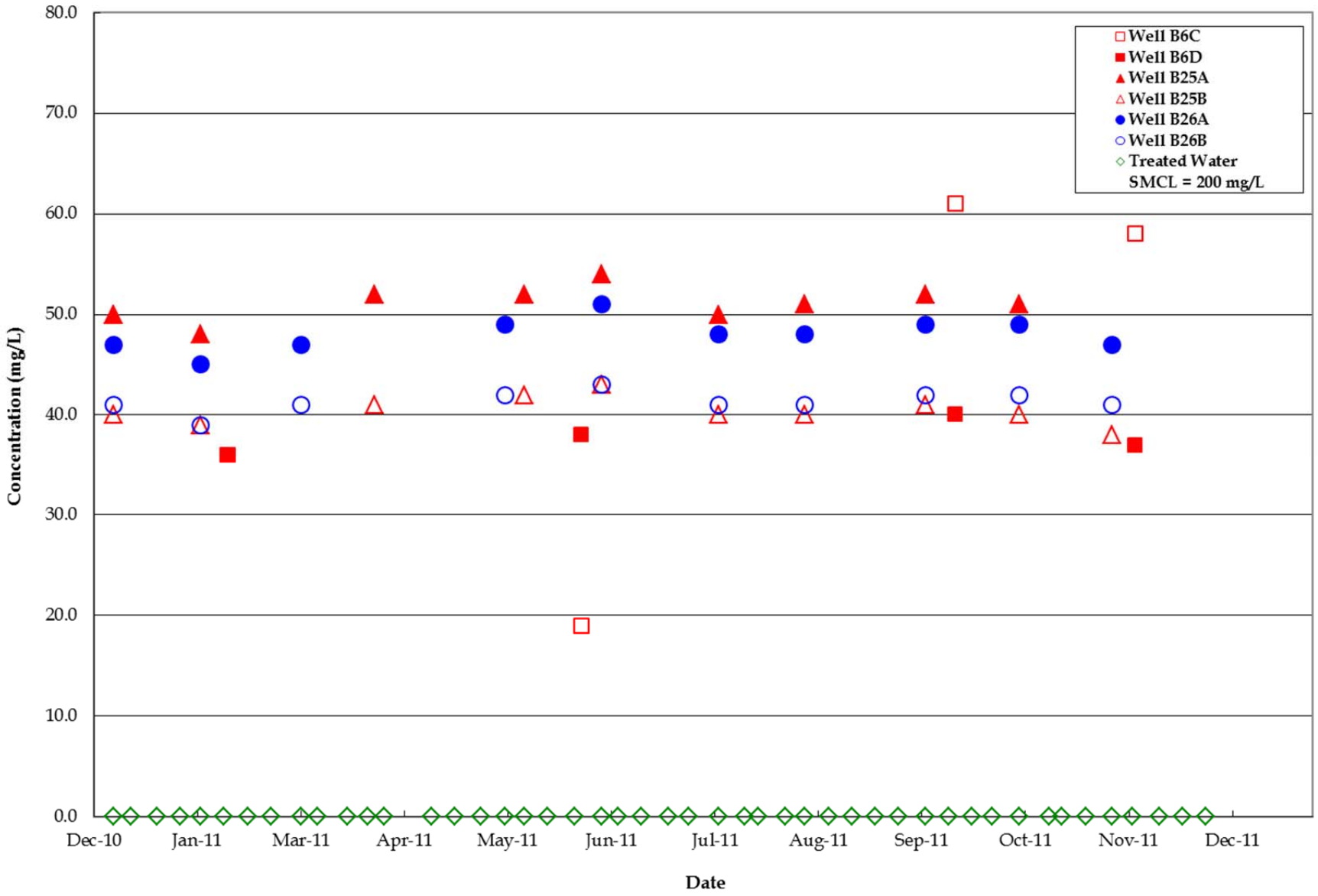


ERM

CIS-1,2-DICHLOROETHENE CONCENTRATIONS, RAW AND TREATED WATER FOR SAN GABRIEL VALLEY WATER COMPANY B6 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-35

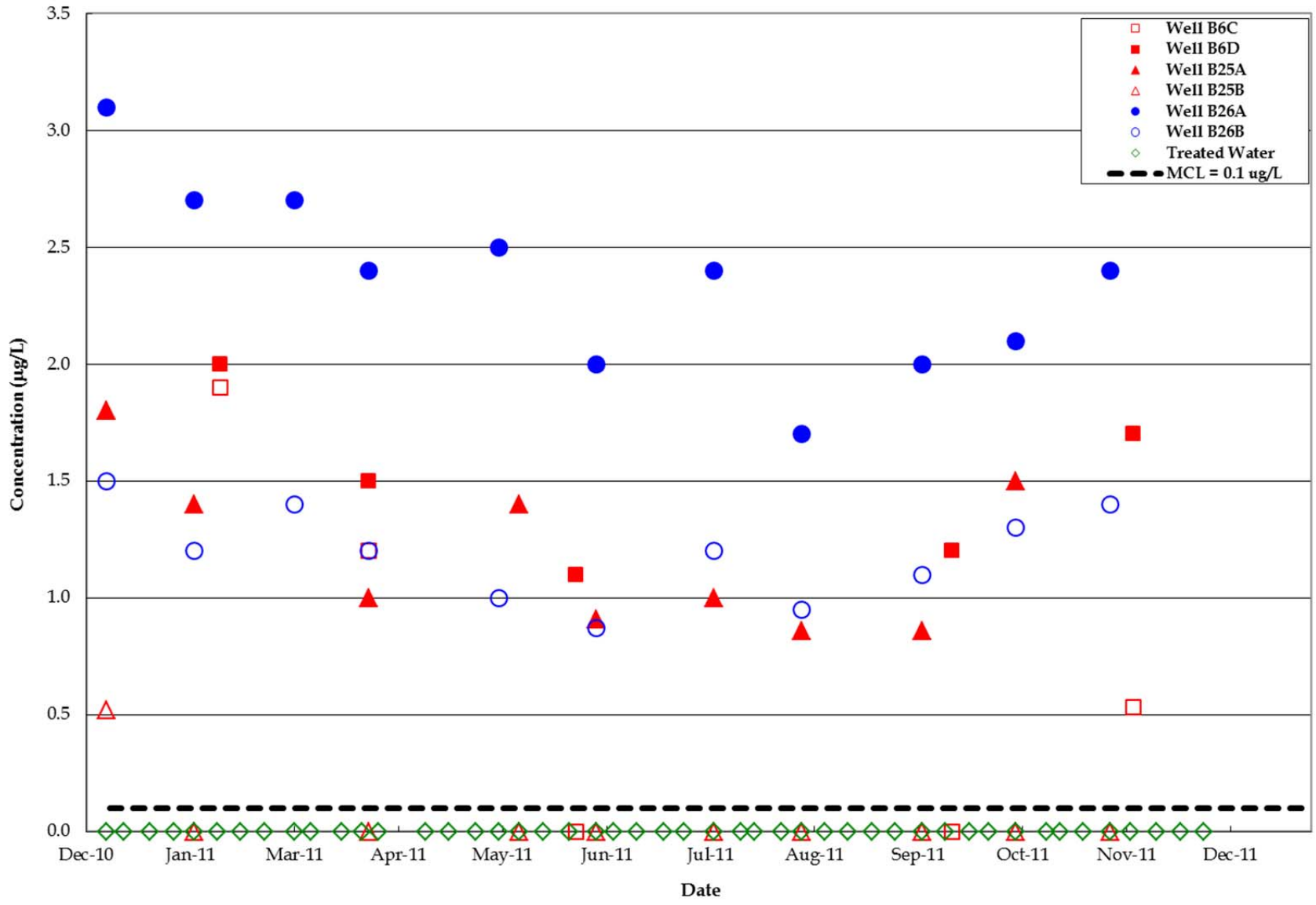


ERM

SULFATE CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B6 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-36

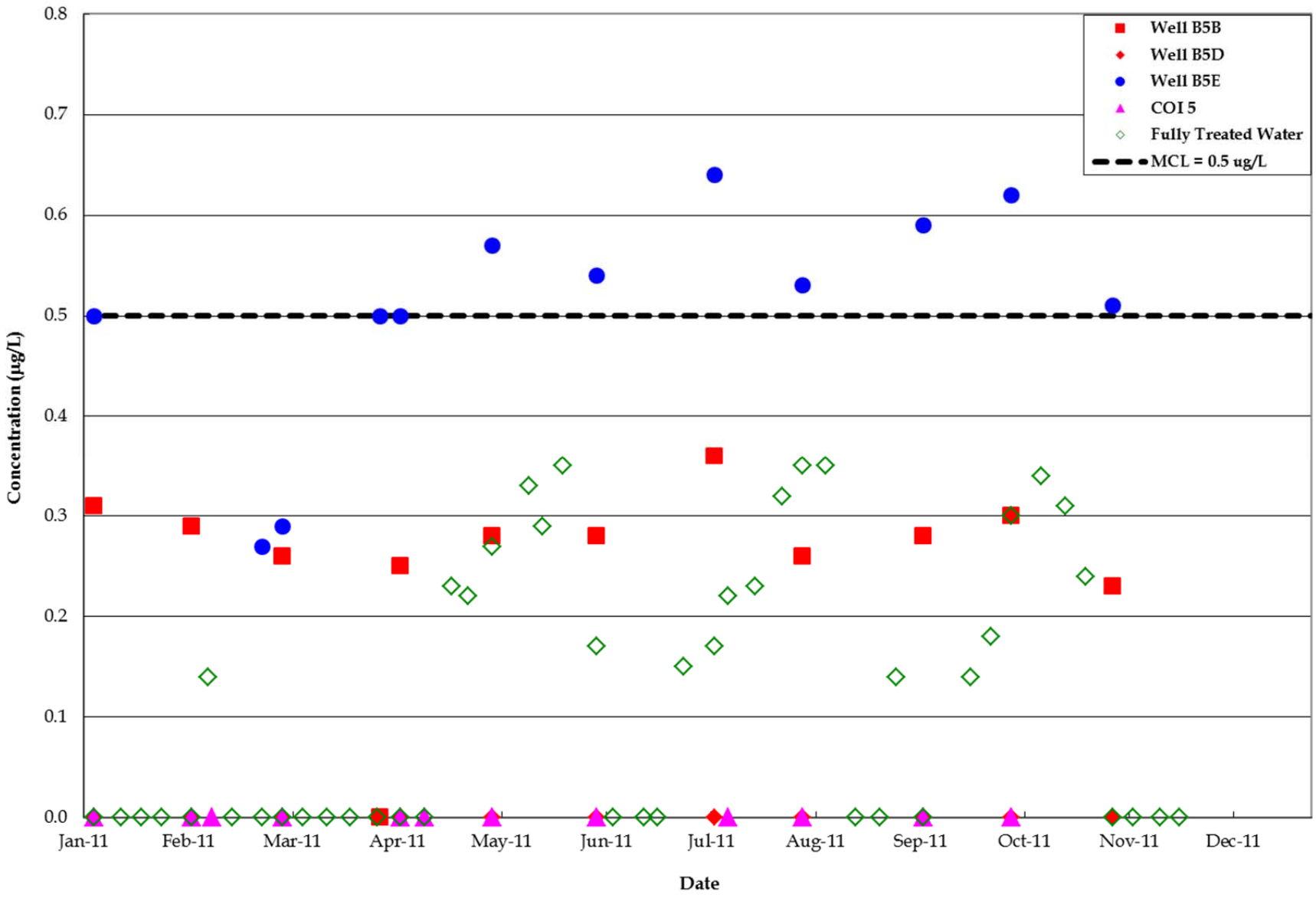


ERM

CHLOROFORM CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B6 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-37

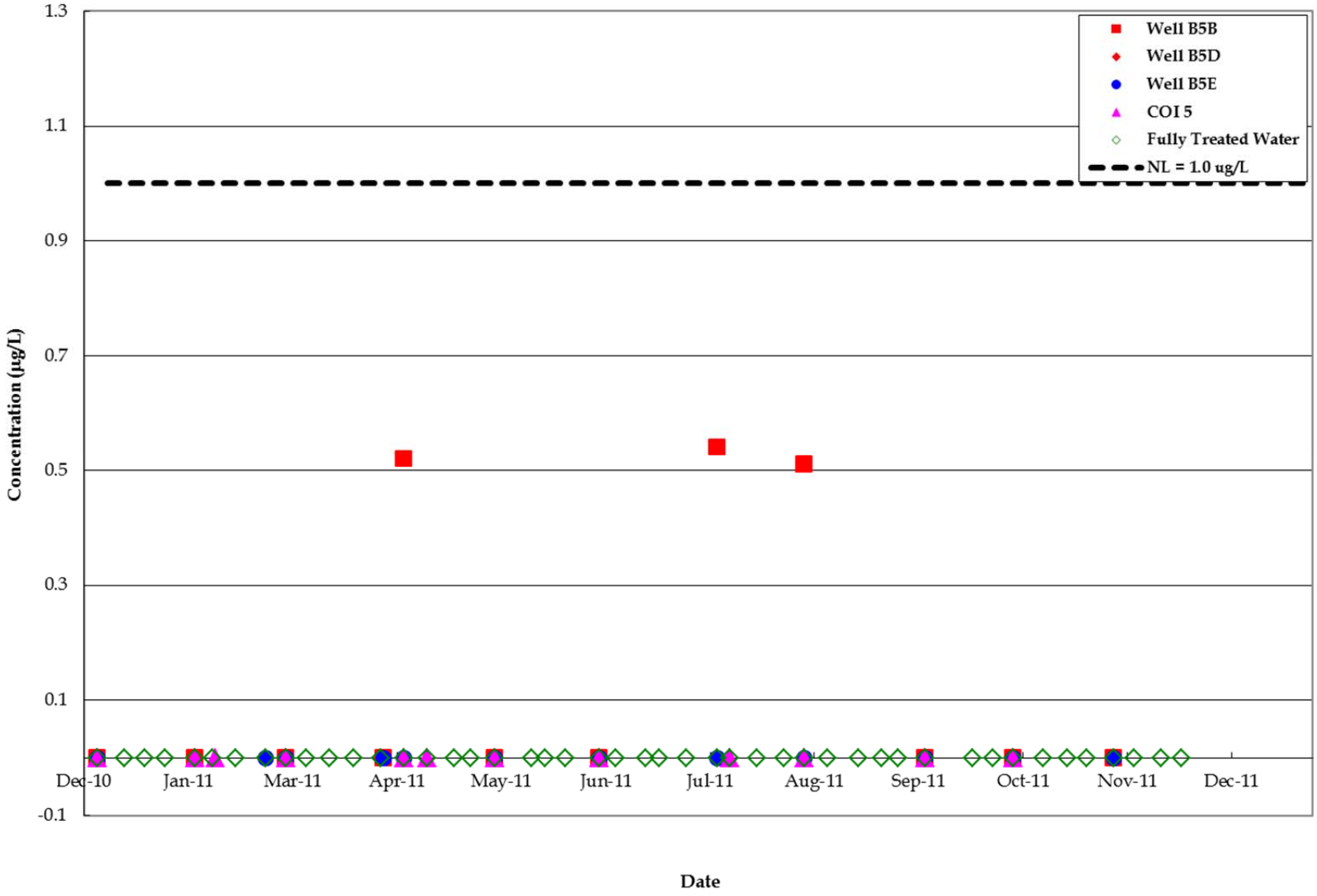


ERM

1,2 DICHLOROETHANE CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B5 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-38

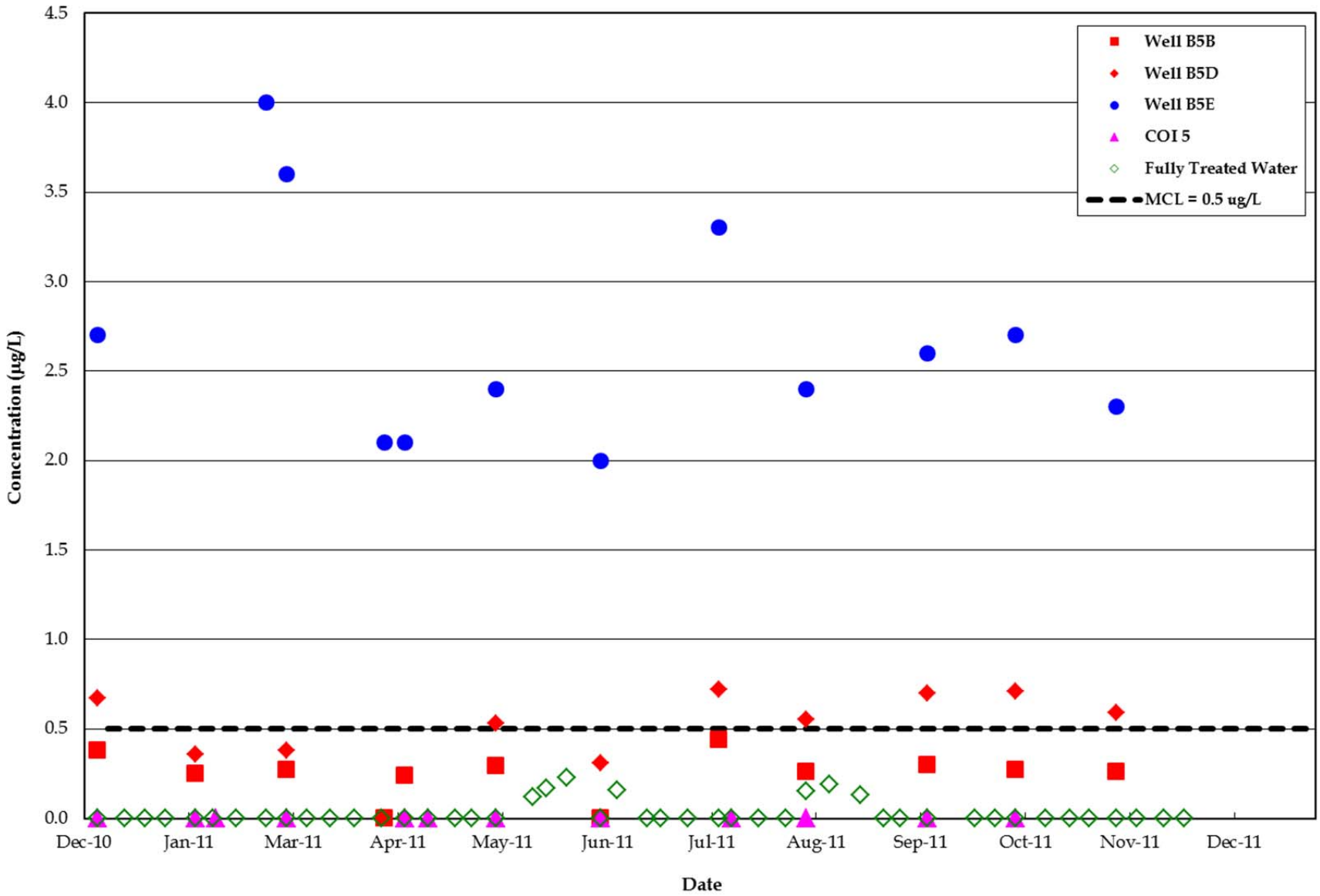


ERM

1,4-DIOXANE CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B5 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-39

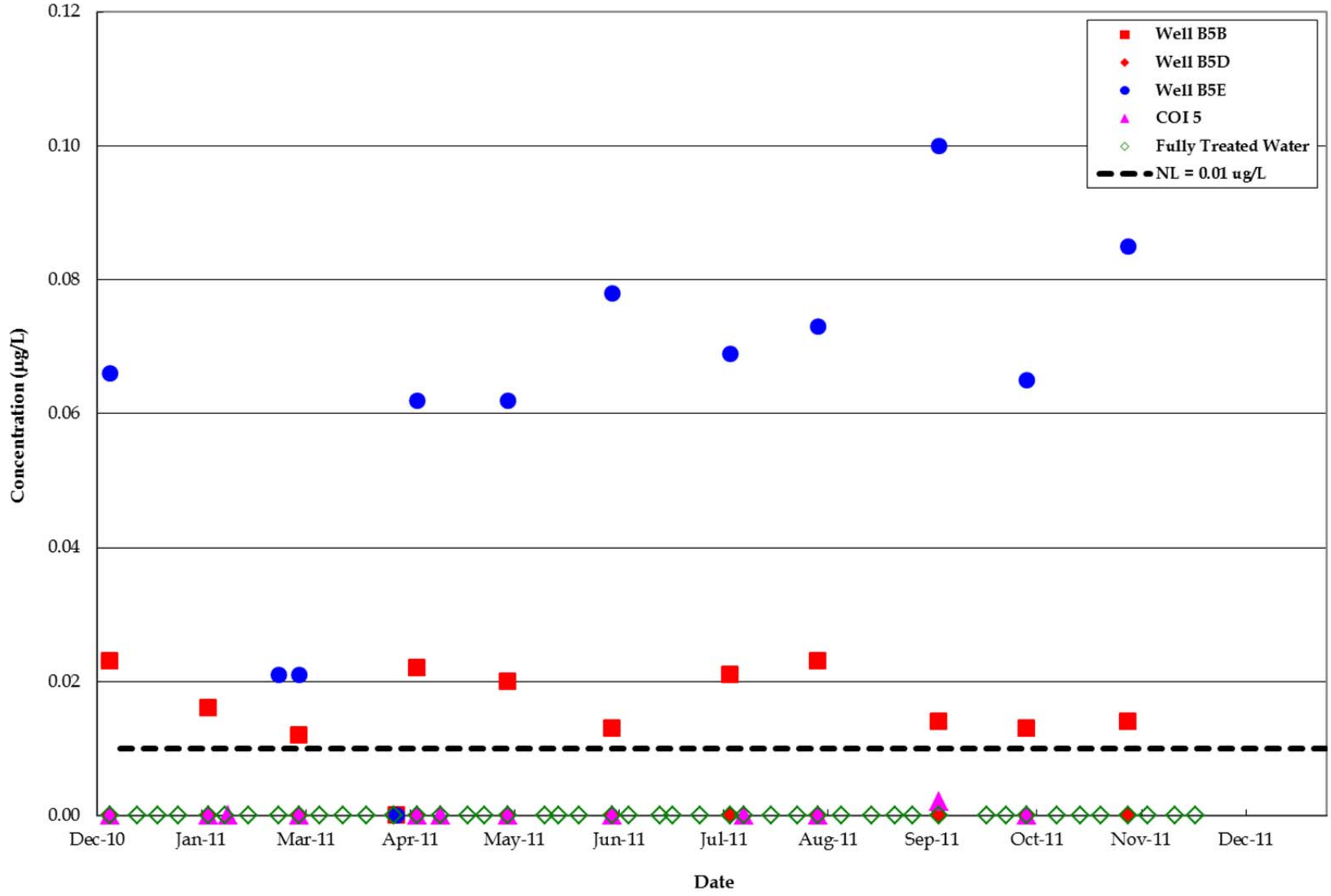


ERM

CARBON TETRACHLORIDE CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B5 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-40

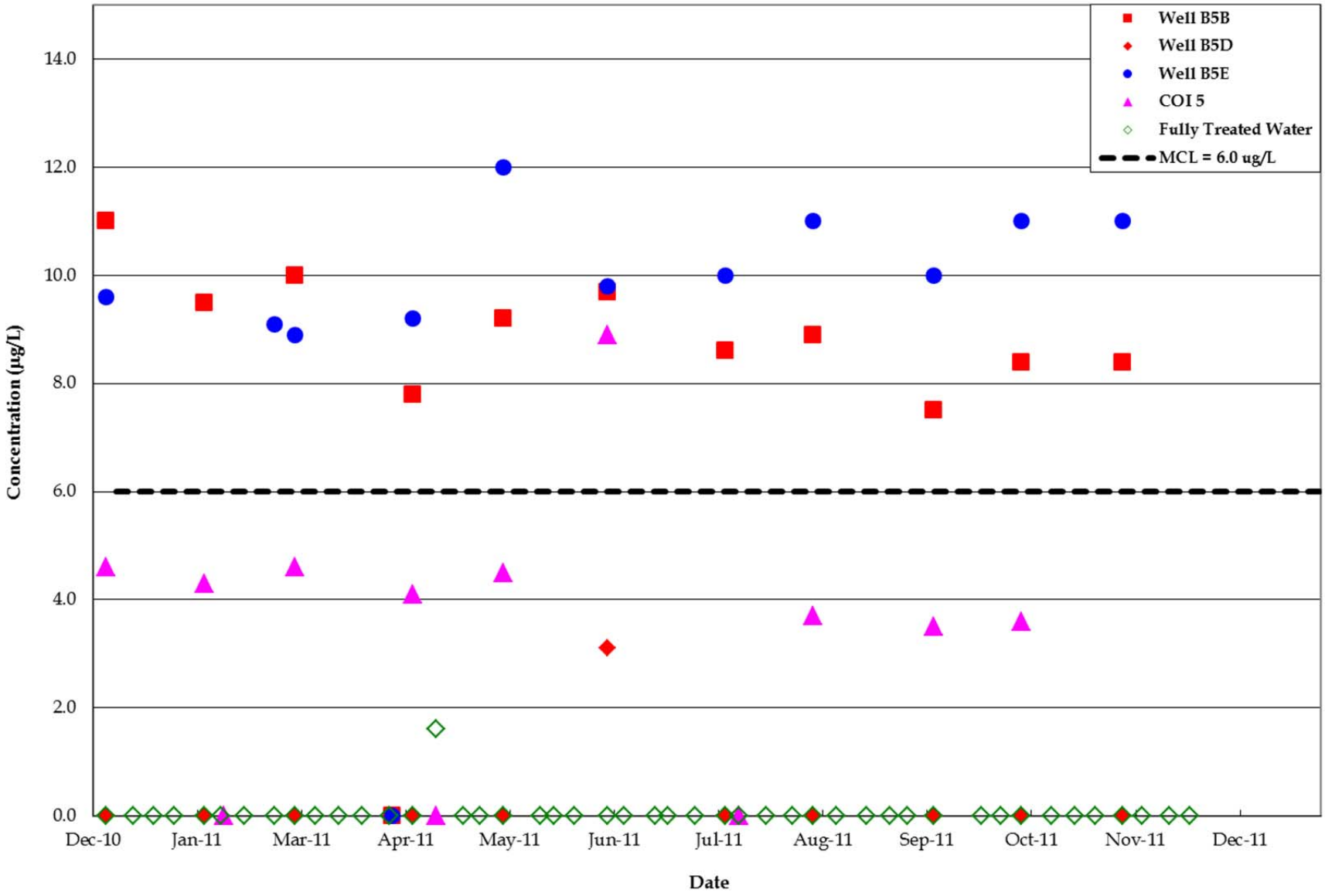


ERM

N-NITROSODIMETHYLAMINE CONCENTRATIONS, RAW AND TREATED WATER FOR SAN GABRIEL VALLEY WATER COMPANY B5 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-41

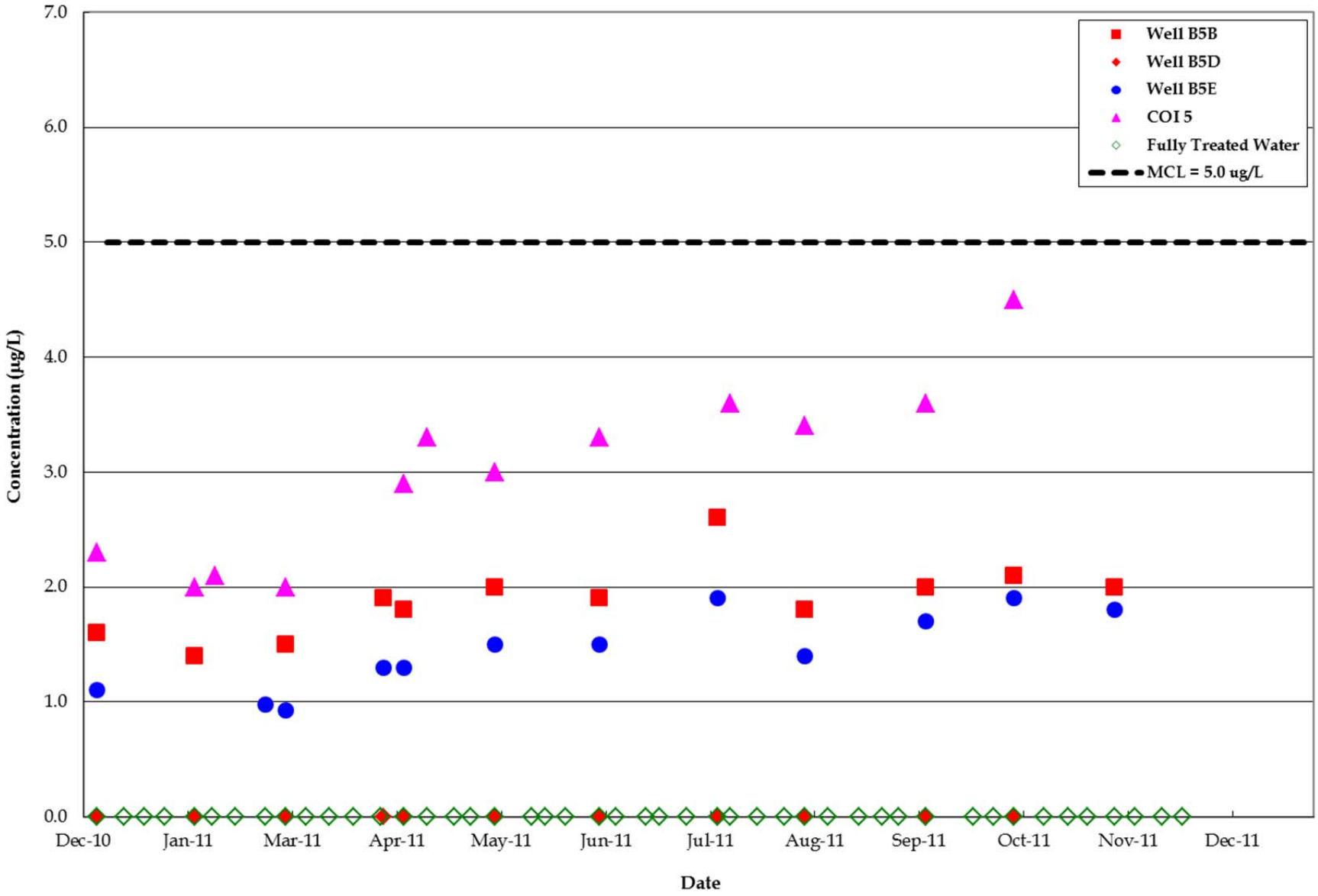


ERM

PERCHLORATE CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B5 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-42

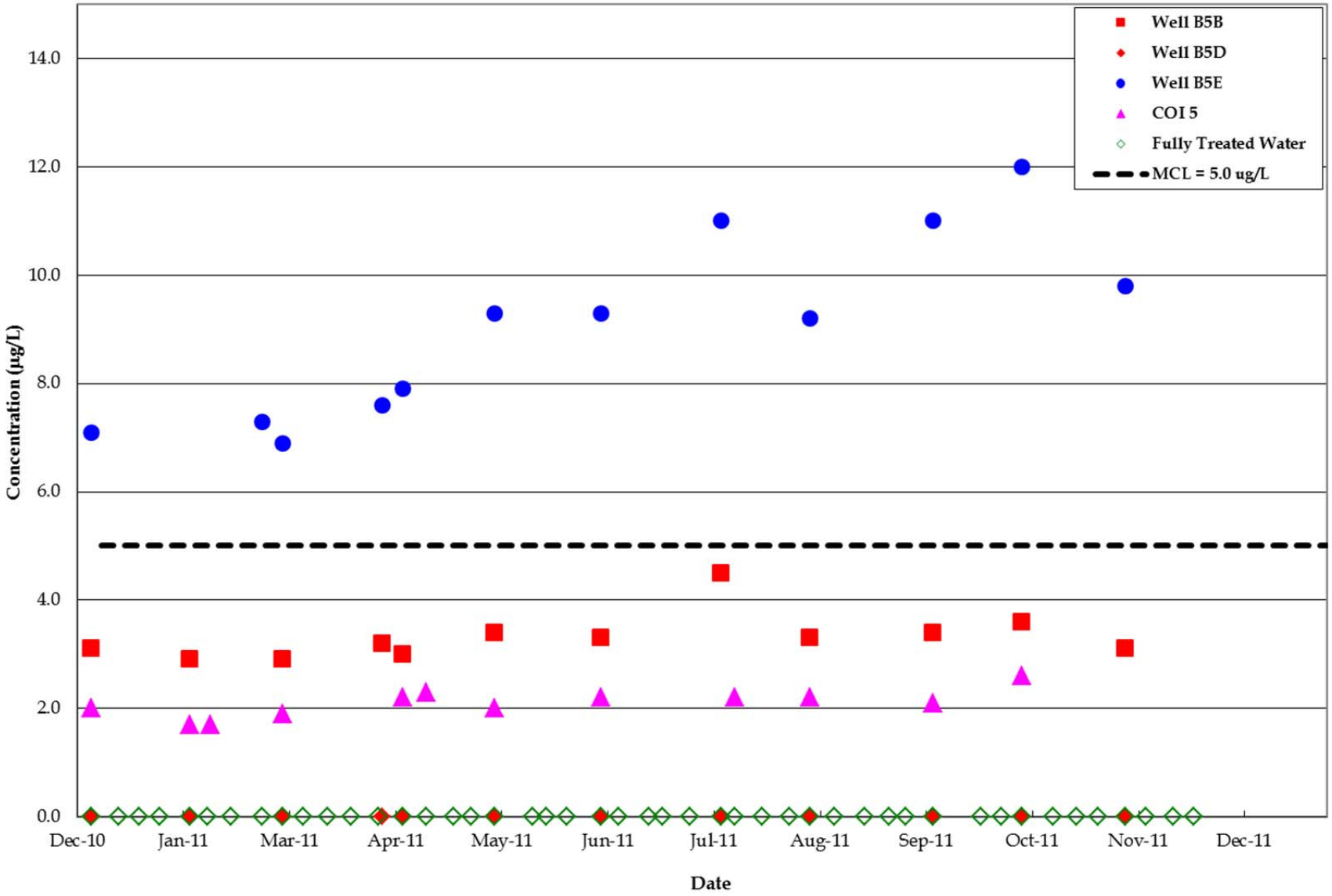


ERM

TETRACHLOROETHENE CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B5 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-43

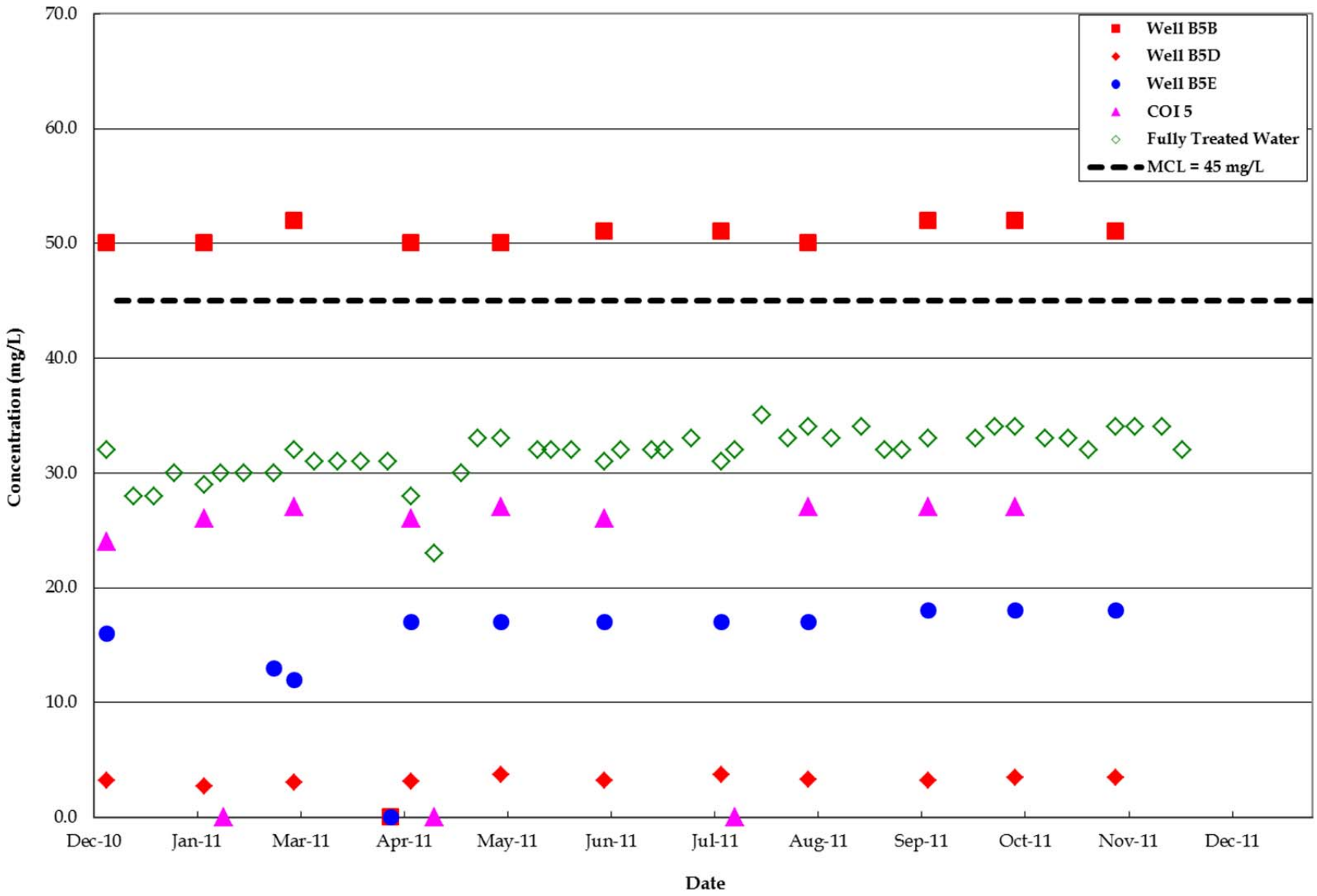


ERM

TRICHLOROETHENE CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B5 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-44

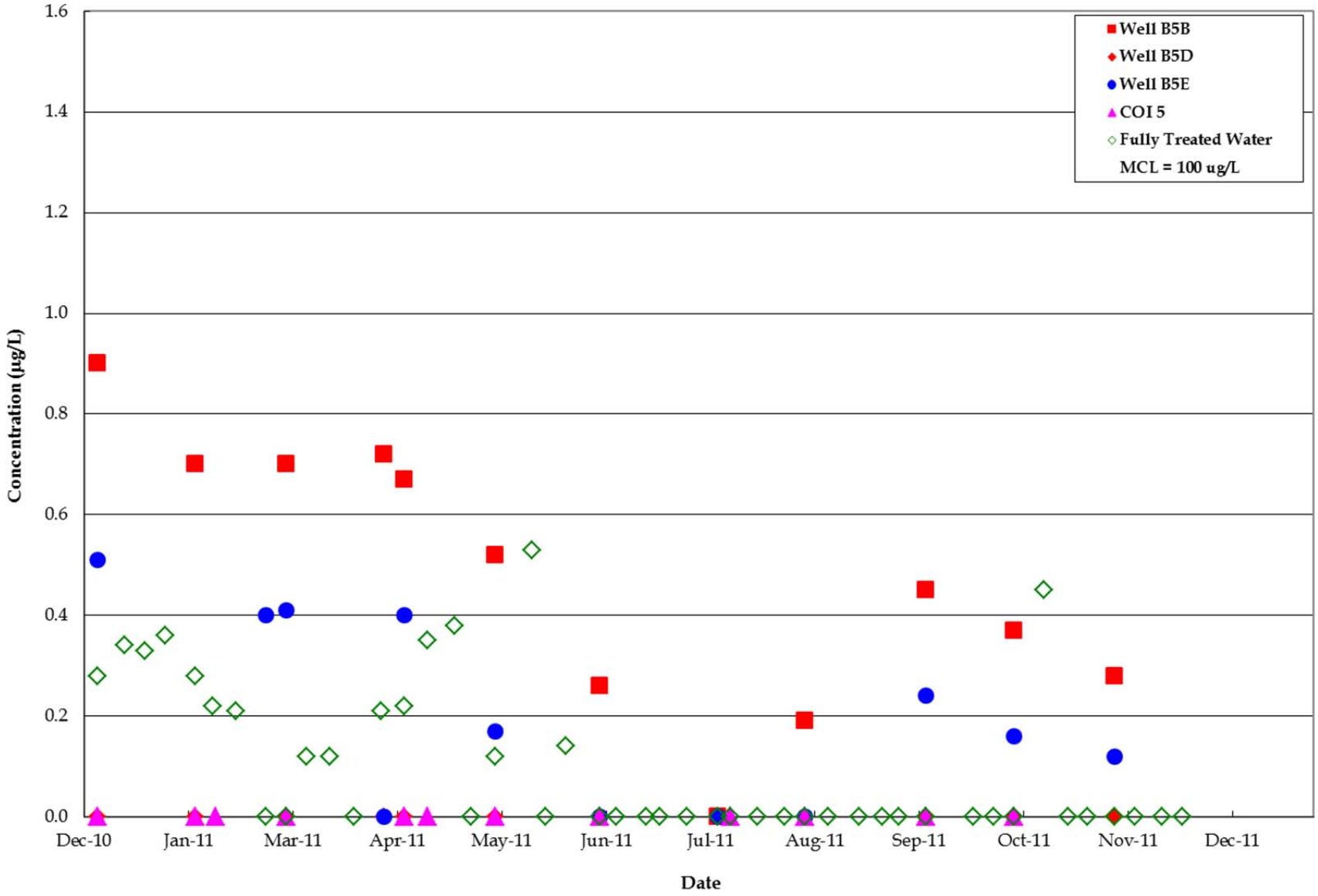


ERM

NITRATE (NO3) CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B5 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-45



ERM

CHLOROFORM CONCENTRATIONS, RAW AND TREATED WATER FOR
SAN GABRIEL VALLEY WATER COMPANY B5 TREATMENT PLANT (2011)
Baldwin Park Operable Unit
San Gabriel Valley, California

Project No.
7190

Figure
6-46